STIC Search Report
EIC 3700

STIC Database Tracking Number: 154556

TO: Andrea Ragonese
Location: RND 7C59
Art Unit: 3743
Thursday, June 23, 2005

Case Serial Number: 09/715853

From: Ethel Leslie
Location: EIC 3700
RND 8A34
Phone: 571-272-5992

Ethel.leslie@uspto.gov

Search Notes

Andrea,

Attached is the completed search for the tissue treatment with radio-frequency. I searched the inventors in the patent literature and the results are attached. I did an extensive search on the requested topic in bibliographic and full-text databases. I don't know if I found anything that will help you, but I have marked several items that I think might be of interest – they are marked with yellow flags. Please look over all the results as there may be other items of interest. I have attached the search strategies used for the searches performed.

If you have a moment, please fill out the attached STIC Feedback Form. If there is anything I can do to refine or revise this search, please let me know.

Sincerely,
Ethel Leslie

P.S. I was out sick earlier this week and I apologize for the delay getting this search completed for you.

Suggs, Faye (ASRC)

From: Unknown@Unknown.com
Sent: Thursday, May 26, 2005 1:04 PM
To: STIC-EIC3700
Subject: Generic form response

ResponseHeader=Commercial Database Search Request

AccessDB#= 164556

LogNumber= _____

Searcher= _____

SearcherPhone= _____

SearcherBranch= _____

MyDate=Thu May 26 13:02:47 EDT 2005

submitto=STIC-EIC3700@uspto.gov

Name=Andrea Ragonese

Empno=77465

Phone=571-272-4804

Artunit=3743

Office=RND 7C59

Serialnum=09/715853

PatClass=600/417

Earliest=10/18/1991

Format1=paper

Searchtopic=Please use claims from amendment filed on February 14, 2005.

Related cases are: 10/274,497; 10/274436

Comments=

send=SEND

STIC Search Results Feedback Form

EIC 3700

Questions about the scope or the results of the search? Contact ***the EIC searcher or contact:***

John Sims, EIC 3700 Team Leader
RND 8B35, Phone 2-3507

Voluntary Results Feedback Form

- *I am an examiner in Workgroup:* ☐ *Example: 3730*
- *Relevant prior art **found**, search results used as follows:*
  - ☐ 102 rejection
  - ☐ 103 rejection
  - ☐ Cited as being of interest.
  - ☐ Helped examiner better understand the invention.
  - ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
  (journal articles, conference proceedings, new product announcements etc.)

- *Relevant prior art **not found:***
  - ☐ Results verified the lack of relevant prior art (helped determine patentability).
  - ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to STIC/EIC3700 RND 8B31

sira Search and Information Resources Administration

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Set      Items   Description
S1     4531504   CONDUCT??? OR ELECTROCONDUCT? OR ELECTRIC? OR ELECTRONI???
             OR ELECTROLY???
S2      730230   SALIN? OR RINGER? ? OR ACETIC?()ACID??? OR VINEGAR? OR ETH-
             ANO? OR SALT???
S3      188906   GEL OR GELS OR JELLY OR JELLIES OR GELATUM? OR GELATIN???
S4      221480   MICROBUBBLE? OR MICRO()BUBBLE? OR CAPSUL?? OR ENCAPSUL? OR
             MICROSPHER? OR MICROBEAD? OR MICROCAPSUL? OR GLOBUL? OR QUANT-
             UM()(DOT OR DOTS) OR BEAD???
S5     1150180   INJECT? OR INFUS??? OR INTRODUC???? OR INTRO()DUC???? OR A-
             DMINIST?
S6      506370   NEEDL? OR SYRINGE? OR HOLLOW??? OR HYPODERMIC? OR HYPO()DE-
             RMIC?
S7      379296   RADIO()FREQUENC? OR RF OR RADIOFREQUENC? OR ELECTROMAGNET?
             OR ELECTRO()MAGNET? OR RADIO()(WAVE? ? OR ENERGY)
S8      631133   HYPERTHERM? OR THERMAL? OR RADIAN?()ENERG???
S9     2838002   PY=2001:2002
S10    3415108   PY=2003:2005
S11     272557   IC=A61B? OR A61D? OR A61N?
S12       8879   S1:S2(5N)S3
S13        500   S12(S)S5:S6
S14          7   S13 (S)S7
S15         16   S13(S)S8
S16         15   S15 NOT S14
S17          8   S16 NOT S9:S10
S18          0   S17 AND S11
S19       9111   S1:S2(5N)S4
S20        685   S19 (S) S5:S6
S21         46   S20 (S) S7:S8
S22         45   S21 NOT (S14 OR S17)
S23         25   S22 NOT S9:S10
S24          0   S23 AND S11
? show files
File 347:JAPIO Nov 1976-2005/Feb(Updated 050606)
         (c) 2005 JPO & JAPIO
File 350:Derwent WPIX 1963-2005/UD,UM &UP=200539
         (c) 2005  Thomson Derwent
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14/5/4 (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX

013465528 **Image available**
WPI Acc No: 2000-637471/200061
XRPX Acc No: N00-472760

Electrolyte assisted tissue ablation device for treating gastroesophageal reflux disease in esophagus, has open cell sponge carrier introduced to electrolyte to prevent its flow from space in cavity to balloon rear

Patent Assignee: ENDONETICS INC (ENDO-N)
Inventor: JONES M; KELLEHER B S; STONE C
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 6112123	A	20000829	US 98123509	A	19980728	200061	B

Priority Applications (No Type Date): US 98123509 A 19980728
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6112123	A		15	A61F-007/12	

Abstract (Basic): US 6112123 A

NOVELTY - An inflatable balloon is attached to shaft (14) for creating space in body cavity bounding the selected tissue. An electrolyte containing saline or gel is **introduced** into the space to contact the tissue. An electrode connected with **RF** generator is immersed in the electrolyte for applying **RF** to ablate the tissue. An open cell sponge carrier is **introduced** into the electrolyte to prevent its flow from space towards balloon, rear.

DETAILED DESCRIPTION - A monitoring unit with impedance measurement circuit and temperature probe (20) contacts the tissue. A depth stopper in probe maintains the temperature probe into tissue at preset depth with respect to the tissue. A barb is attached to the probe for holding the probe in tissue.

USE - For treating gastroesophageal reflux disease in esophagus.

ADVANTAGE - Stops ablation when wall of esophagus changes from pink to white, and hence the defect can be analyzed reliably.

DESCRIPTION OF DRAWING(S) - The figure shows perspective view of device for use in performing electrolyte assisted ablation.

Shaft (14)

Temperature probe (20)

pp; 15 DwgNo 1A/9

Title Terms: ELECTROLYTIC; ASSIST; TISSUE; ABLATE; DEVICE; TREAT; REFLUX; DISEASE; OPEN; CELL; SPONGE; CARRY; INTRODUCING; ELECTROLYTIC; PREVENT; FLOW; SPACE; CAVITY; BALLOON; REAR
Derwent Class: P32; S03; S05
International Patent Class (Main): A61F-007/12
File Segment: EPI; EngPI
?

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Set     Items   Description
S1    1149340   INJECT? OR INFUS??? OR INTRODUC???? OR INTRO()DUC???? OR A-
            DMINIST?
S2      80894   RADIO()FREQUENC? OR RF OR RADIOFREQUENC?
S3     506051   NEEDL? OR SYRINGE? OR HOLLOW??? OR HYPODERMIC? OR HYPO()DE-
            RMIC?
S4     188735   GEL OR GELS OR JELLY OR JELLIES OR GELATUM? OR GELATIN???
S5     137731   MICROBUBBLE? OR MICRO()(BUBBLE? OR CAPSUL??) OR MICROSPHER?
             OR MICROBEAD? OR MICROCAPSUL? OR GLOBUL? OR QUANTUM()(DOT OR
            DOTS) OR BEAD OR BEADS
S6     272259   IC=A61B? OR A61D? OR A61N?
S7    2838004   PY=2001:2002
S8    3398426   PY=2003:2005
S9       2903   S1 (S) S2
S10       986   S1(10N)S2
S11         0   S10 (10N) S4:S5
S12         3   S10 (S) S4:S5
S13      1879   S4 (5N) S5
S14         2   S13 (S) S2
S15     80894   (S2 OR S3) (10N) S2
S16      1219   (S1 OR S3) (10N) S2
S17        17   S16 AND S4:S5
S18         3   S17 AND S6
S19       192   S9 AND S6
S20        73   S19 NOT S7:S8
S21         1   S20 AND S4:S5
S22         1   S21 NOT S18
S23        84   S9 (S) S3
S24        45   S23 NOT S7:S8
S25        14   S24 AND S6
S26       749   S16 NOT S7:S8
S27        74   S26 AND S6
S28        63   S27 NOT S25
S29         0   S28 AND S4:S5
S30         0   S28 AND S5
S31       834   S2 (S) S4:S5
S32       424   S2(10N)S4:S5
S33        50   S2(10N)S5
S34         1   S33 AND S6
S35         1   S34 NOT (S28 OR S25 OR S18)
S36     91403   ENCAPSUL? OR CAPSUL?
S37       178   S36 (S) S2
S38        18   S37 AND S6
S39         4   S38 NOT S7:S8
S40         1   S39 NOT (S28 OR S25 OR S18)
S41    630674   HYPERTHERM? OR THERMAL? OR RADIAN?()ENERG???
S42      7476   S41 (S) (S5 OR S36)
S43        42   S42 AND S6
S44        16   S43 NOT S7:S8
S45        16   S44 NOT (S28 OR S25 OR S18)
? show files;logoff hold
File 347:JAPIO Nov 1976-2005/Feb(Updated 050606)
        (c) 2005 JPO & JAPIO
File 350:Derwent WPIX 1963-2005/UD,UM &UP=200538
        (c) 2005  Thomson Derwent
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18/5/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX

014448141 **Image available**
WPI Acc No: 2002-268844/200231
XRAM Acc No: C02-079680
XRPX Acc No: N02-209273
Tissue ablation device comprises, introducer **having distal end,** radio frequency **electrodes movable between non-deployed and deployed state and occluder that occludes distal end of introducer, in non-deployed state**
Patent Assignee: US DEPT HEALTH & HUMAN SERVICES (USSH); WOOD B J (WOOD-I)
Inventor: WOOD B J
Number of Countries: 096 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200203873	A2	20020117	WO 2001US20632	A	20010628	200231	B
AU 200171586	A	20020121	AU 200171586	A	20010628	200234	
US 20030208197	A1	20031106	WO 2001US20632	A	20010628	200374	
			US 2003332297	A	20030106		

Priority Applications (No Type Date): US 2000217033 P 20000710; US 2003332297 A 20030106
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200203873	A2	E	15	A61B-018/14	

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

AU 200171586	A		A61B-018/14	Based on patent WO 200203873
US 20030208197	A1		A61B-018/14	

Abstract (Basic): WO 200203873 A2

NOVELTY - Tissue ablation device comprises, an **introducer** (12) having proximal and distal ends (14), **radio frequency** (**RF**) electrode(s) (18) movable between a non-deployed state within the **introducer** and a deployed state, an electrode advancement element coupled to **RF** electrodes and an occluder (16) that occludes the distal portion of the introducer, when the electrode device is in the non-deployed state.

DETAILED DESCRIPTION - Tissue ablation device comprises, an **introducer** having a proximal and a distal portions, **radio frequency** (**RF**) electrode(s) movable between a non-deployed state within the **introducer** and a deployed state, an electrode advancement element coupled to the RF electrode and an occluder that occludes the distal portion of the introducer when the electrode device is in the non-deployed state. The **RF** electrodes are movable between a non-deployed state within the **introducer** and a deployed state in which the electrodes extend from the distal portion of the **introducer** . The EAE coupled to the **RF** electrodes, is capable of moving the RF electrodes between the non-deployed and deployed state.

An INDEPENDENT CLAIM is also included for method of ablating tissue in a subject which involves inserting an **introducer** into the subject, deploying several **RF** electrodes from the **introducer** into the subject's tissue, and applying **RF** energy to the RF electrodes. The

distal end of the occluder is occluded by an occluder prior to deployment of the RF electrodes.

USE - For tissue ablation, for reducing tissue volume.

ADVANTAGE - The RF tissue ablation device induces minimal tissue trauma. The device is easily operated using only one hand, thereby leaving the operators other hand free for other users such as operating a medical imaging device or managing the delivery of radio frequency energy. The RF electrodes are fully deployed in dense or calcified tissue.

DESCRIPTION OF DRAWING(S) - The figure shows a perspective view which illustrates RF tissue ablation device.

Introducer (12)
Distal end (14)
Occluder (16)
RF electrodes (18)
pp; 15 DwgNo 1/4

Title Terms: TISSUE; ABLATE; DEVICE; COMPRISE; INTRODUCING; DISTAL; END; RADIO; FREQUENCY; ELECTRODE; MOVE; NON; DEPLOY; DEPLOY; STATE; OCCLUDE; OCCLUDE; DISTAL; END; INTRODUCING; NON; DEPLOY; STATE
Derwent Class: A11; A14; A96; P31
International Patent Class (Main): **A61B-018/14**
File Segment: CPI; EngPI

18/5/2 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX

013586304 **Image available**
WPI Acc No: 2001-070511/200108
Related WPI Acc No: 2002-404901
XRAM Acc No: C01-019535
XRPX Acc No: N01-053391

Surgical incision treatment system for tissues of humans and animals, supplies sealant and coolant to cut edge of tissue in controlled manner to reduce post-surgical complications

Patent Assignee: NTERO SURGICAL INC (NTER-N)
Inventor: BOMMANNAN D B; LAUFER M D
Number of Countries: 091 Number of Patents: 006
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200054682	A1	20000921	WO 2000US6949	A	20000316	200108	B
AU 200037524	A	20001004	AU 200037524	A	20000316	200108	
EP 1161192	A1	20011212	EP 2000916416	A	20000316	200204	
			WO 2000US6949	A	20000316		
US 6338731	B1	20020115	US 99271268	A	19990317	200208	
JP 2002538880	W	20021119	JP 2000604766	A	20000316	200281	
			WO 2000US6949	A	20000316		
US 6520185	B1	20030218	US 99271268	A	19990317	200317	
			US 99388363	A	19990901		

Priority Applications (No Type Date): US 99388363 A 19990901; US 99271268 A 19990317
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200054682	A1	E	36	A61B-018/04	

Designated States (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR

IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW
AU 200037524 A Based on patent WO 200054682
EP 1161192 A1 E A61B-018/04 Based on patent WO 200054682
Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI
US 6338731 B1 A61B-018/04
JP 2002538880 W 40 A61B-019/00 Based on patent WO 200054682
US 6520185 B1 A61B-019/00 CIP of application US 99271268
CIP of patent US 6338731

Abstract (Basic): WO 200054682 A1

NOVELTY - Sealant and coolant applicators arranged on treatment surface of trocar sleeve (70) and disposed adjacent to cut edge of tissue, supply sealant and coolant to cut edge of tissue, in a controlled manner to reduce post-surgical complications. The sleeve having a **hollow** channel, is coupled to an energy source (200) that supplies **RF** energy to cut edge tissue, via one or more electrodes.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for the surgical incision treatment method.

USE - For treating surgical incisions or perforations of the tissues especially peritoneum, pleura during laparoscopic surgery, laparotomies and other minimally invasive surgeries, open chest or open abdominal surgery. And also for surgically injured mammalian tissues.

ADVANTAGE - The RF source is designed more robustly, to last multiple battery cycles and to accept sterilization. The RF source is relatively inexpensive, since it can be re-sterilized after use. The sealant applied around the injured tissues, eliminates the formation of post-surgical adhesions by blocking the release of adhesion-inducing substances such as growth factors, transforming growth factors and TGF-beta from the injured tissues and/or adjacent lymphatic tissues.

DESCRIPTION OF DRAWING(S) - The figure shows the perspective view of two-part trocar-based RF energy delivery system and perspective view of obturator inserted into trocar sleeve.

Trocar sleeve (70)
Energy source (200)
pp; 36 DwgNo 1a, 1b/10

Title Terms: SURGICAL; INCISION; TREAT; SYSTEM; TISSUE; HUMAN; ANIMAL; SUPPLY; SEAL; COOLANT; CUT; EDGE; TISSUE; CONTROL; MANNER; REDUCE; POST; SURGICAL; COMPLICATED
Derwent Class: A96; P31; S05
International Patent Class (Main): **A61B-018/04** ; **A61B-019/00**
International Patent Class (Additional): **A61B-005/0408** ; **A61B-005/0478** ; **A61B-005/0492** ; **A61B-005/05** ; **A61B-017/00** ; **A61B-018/00** ; **A61B-018/18**

File Segment: CPI; EPI; EngPI

18/5/3 (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX

013565510
WPI Acc No: 2001-049717/200106
Related WPI Acc No: 2001-031784; 2001-031785
XRAM Acc No: C01-013593
XRPX Acc No: N01-038147
Sealing an injection **site of a tissue comprising use of** radio frequency **cautery, prevents loss of** injected **therapeutic agent prior to cell uptake**
Patent Assignee: SCIMED LIFE SYSTEMS INC (SCIM-N); BOSTON SCI LTD (BOST-N); GORDON L S (GORD-I); PALASIS M (PALA-I)

Inventor: GORDON L S; PALASIS M
Number of Countries: 093 Number of Patents: 006
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200067655	A2	20001116	WO 2000US11765	A	20000502	200106	B
AU 200049784	A	20001121	AU 200049784	A	20000502	200112	
EP 1176918	A2	20020206	EP 2000931987	A	20000502	200218	
			WO 2000US11765	A	20000502		
US 6554851	B1	20030429	US 99133122	P	19990507	200331	
			US 2000521473	A	20000308		
US 20030181908	A1	20030925	US 99133122	P	19990507	200364	
			US 2000521473	A	20000308		
			US 2003388468	A	20030317		
JP 2003530897	W	20031021	JP 2000616688	A	20000502	200373	
			WO 2000US11765	A	20000502		

Priority Applications (No Type Date): US 2000521473 A 20000308; US 99133122 P 19990507; US 2003388468 A 20030317
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200067655	A2	E	25	A61B-018/00	
Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW					
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW					
AU 200049784	A				Based on patent WO 200067655
EP 1176918	A2	E		A61B-018/00	Based on patent WO 200067655
Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI					
US 6554851	B1			A61B-017/08	Provisional application US 99133122
US 20030181908	A1			A61B-018/18	Provisional application US 99133122
					Div ex application US 2000521473
					Div ex patent US 6554851
JP 2003530897	W		23	A61B-017/00	Based on patent WO 200067655

Abstract (Basic): WO 200067655 A2

NOVELTY - A method for sealing an **injection** site comprising performing **radio frequency** cautery at a mouth of a **needle** track in tissue, performing resistance heating at a mouth of a needle track, performing laser heating, plugging a mouth of a needle track, or coagulating at least 1 material at a mouth of a needle track, is new.

DETAILED DESCRIPTION - A method for sealing an **injection** site comprising performing **radio frequency** cautery at a mouth of a **needle** track in tissue, performing resistance heating at a mouth of a needle track, performing laser heating, plugging a mouth of a needle track, or coagulating at least 1 material at a mouth of a needle track, is new. The needle track is formed by injecting a therapeutic agent into a tissue with an injection device and removing the injection device from the tissue.

An INDEPENDENT CLAIM is also included for a method for delivering a therapeutic agent into a tissue in a mammal comprising injecting a therapeutic agent into tissue of a mammal in need of the therapeutic agent and delivering a thickening agent to the tissue of the mammal.

USE - The method is useful for sealing an injection site.

ADVANTAGE - The method prevents loss of injected therapeutic agent prior to cell uptake. It results in an increased exposure of the target tissue to the therapeutic agents administered. There is increased efficiency of localized drug delivery.

pp; 25 DwgNo 0/0
Title Terms: SEAL; INJECTION; SITE; TISSUE; COMPRISE; RADIO; FREQUENCY; CAUTERISE; PREVENT; LOSS; INJECTION; THERAPEUTIC; AGENT; PRIOR; CELL; UPTAKE
Derwent Class: A96; B07; P31
International Patent Class (Main): **A61B-017/00** ; **A61B-017/08** ; **A61B-018/00** ; **A61B-018/18**
File Segment: CPI; EngPI

25/5/1 (Item 1 from file: 347)
DIALOG(R)File 347:JAPIO

06599256 **Image available**
MULTIFUNCTIONAL OPERATION INSTRUMENT

PUB. NO.: 2000-185053 [JP 2000185053 A]
PUBLISHED: July 04, 2000 (20000704)
INVENTOR(s): DURGIN RUSSEL F
CAIRA SHEILA
APPLICANT(s): BOSTON SCIENTIFIC LTD
APPL. NO.: 11-303333 [JP 99303333]
FILED: October 26, 1999 (19991026)
PRIORITY: 178570 [US 98178570], US (United States of America), October 26, 1998 (19981026)
INTL CLASS: **A61B-018/12** ; **A61B-017/12**

ABSTRACT

PROBLEM TO BE SOLVED: To enable a doctor to use a single operation instrument having a function as a hemostatic forceps and the other functions in combination by providing a catheter, a bipolar hemostatic forceps assembly, a fitting member and an operation tool, and fitting the operation tool to the distal end of the fitting member.
SOLUTION: An operation instrument 100 has a bipolar hemostatic forceps assembly 110, a douche assembly 130 and an **injection needle** assembly 150. The bipolar hemostatic forceps assembly 110 has an **RF** terminal 112, an electric conductor 114 and a bipolar electrode assembly 20 at the distal end. The bipolar electrode assembly 120 is capable of treating a person with hemostatic forceps. The douche assembly 130 is so constructed that a douche liquid passes through a catheter main shaft 108 to be delivered to a region in the body of a patient through an intermediate pipe at the distal end. With the **injection needle** assembly 150, an **injection** is delivered to a patient through an **injection needle** 152 and the **injection needle** 152 can be moved at the distal end.

25/5/2 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX

013279242 **Image available**
WPI Acc No: 2000-451177/200039
Related WPI Acc No: 1997-165059; 1997-165061; 1997-258568; 1997-258569; 1997-424707; 1997-470595; 1997-488764; 1997-488765; 1997-502809; 1998-239054; 1998-426817; 1998-494593; 1999-131171; 1999-337443; 1999-357529; 1999-384134; 1999-428991; 1999-443090; 1999-468091; 1999-526902; 1999-633262; 2000-270956; 2000-270957; 2000-364060; 2000-375207; 2000-440876; 2001-089857; 2002-361047; 2003-089765; 2003-298306; 2003-625017; 2003-786388; 2003-895630; 2003-895848; 2004-058308; 2004-058443; 2004-223850; 2004-675669; 2005-079016; 2005-171774
XRPX Acc No: N00-335876
Cell necrosis apparatus for tumor treatment, has flexible introducer with tissue piercing distal end, in which radio frequency electrodes are positioned
Patent Assignee: RITA MEDICAL SYSTEMS INC (RITA-N)

Inventor: GOUGH E J
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 6080150	A	20000627	US 95515379	A	19950815	200039	B
			US 96605323	A	19960214		
			US 97963239	A	19971103		
			US 9820182	A	19980206		
			US 9828436	A	19980224		

Priority Applications (No Type Date): US 9828436 A 19980224; US 95515379 A 19950815; US 96605323 A 19960214; US 97963239 A 19971103; US 9820182 A 19980206
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6080150	A		17	A61B-017/39	CIP of application US 95515379
					CIP of application US 96605323
					CIP of application US 97963239
					CIP of application US 9820182
					CIP of patent US 5683384
					CIP of patent US 5728143

Abstract (Basic): US 6080150 A

NOVELTY - A pair of RF electrodes (16) is positioned in the flexible introducer (14) that has tissue piercing sharp distal end (14'). The RF electrodes provided with tissue piercing distal ends (16'), are deployed with curvature from the periphery of introducer at selected tissue site, laterally.

DETAILED DESCRIPTION - The flexible **introducer** (14) and the **RF** electrodes (16) are **hollow** to receive fluid medium and are surrounded by an insulation sleeve (18). A sensor (24) is coupled to the **introducer** .

USE - For use in tumor treatment.

ADVANTAGE - Since the introducer is flexible, it can be advanced through or around a selected target cell necrosis mass, positioned at any desired site in tissue and retrieved back, easily.

DESCRIPTION OF DRAWING(S) - The figure shows perspective view of cell necrosis apparatus.

Flexible introducer (14)
Distal ends (14',16')
RF electrode (16)
Insulation sleeve (18)
Sensor (24)
pp; 17 DwgNo 1/10

Title Terms: CELL; NECROSIS; APPARATUS; TUMOUR; TREAT; FLEXIBLE; INTRODUCING; TISSUE; PIERCE; DISTAL; END; RADIO; FREQUENCY; ELECTRODE; POSITION
Derwent Class: P31; S05
International Patent Class (Main): **A61B-017/39**
File Segment: EPI; EngPI

25/5/3 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX

012814027
WPI Acc No: 1999-620258/199953
XRAM Acc No: C99-181022
XRPX Acc No: N99-457479
In vivo magnetic resonance vascular imaging method using laser polarized

gas microbubbles for probing lungs, blood, muscle and brain tissues
Patent Assignee: UNIV DUKE (UYDU-N)
Inventor: CHAWLA M S; JOHNSON G A
Number of Countries: 022 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9952428	A1	19991021	WO 99US7664	A	19990408	199953	B
AU 9933867	A	19991101	AU 9933867	A	19990408	200013	
US 6051208	A	20000418	US 9881488	A	19980413	200026	
			US 99288212	A	19990408		

Priority Applications (No Type Date): US 9881488 P 19980413; US 99288212 A 19990408
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9952428	A1	E	16	A61B-005/055	
Designated States (National): AU CA JP					
Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE					
AU 9933867	A				Based on patent WO 9952428
US 6051208	A			A61B-005/055	Provisional application US 9881488

Abstract (Basic): WO 9952428 A1
NOVELTY - The method for nuclear magnetic resonance (NMR) imaging of a vascular system of animal or human comprises:
(a) injecting liquid containing biocompatible liquid carrier and dispersion of hyperpolarized gas microbubbles into the vascular system;
(b) generating an NMR image representing spatial distribution of injected hyperpolarized gas microbubbles.
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for biocompatible injectable liquid which enhances NMR imaging, comprising a biocompatible liquid carrier and hyperpolarized noble gas microbubbles suspended in liquid carrier.
USE - In vivo magnetic resonance vascular imaging method using laser polarized gas microbubbles is meant for probing void spaces in lungs, tissue of blood, muscle and brain.
ADVANTAGE - Use of hyperpolarized noble gas enables potential increase in signal in absence of background thereby permitting high resolution magnetic resonance images in human or animal vascular systems (angiographic images). The noble gas is preferably hyperpolarized by optical (laser) pumping in presence of alkali metal or by metastability exchange. The microbubble of hyperpolarized gas has smaller diameter to facilitate safe passage of gas through pulmonary circulation.
pp; 16 DwgNo 0/3
Title Terms: VIVO; MAGNETIC; RESONANCE; VASCULAR; IMAGE; METHOD; LASER; GAS ; PROBE; LUNG; BLOOD; MUSCLE; BRAIN; TISSUE
Derwent Class: B04; P31
International Patent Class (Main): **A61B-005/055**
File Segment: CPI; EngPI

25/5/4 (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX

012733367 **Image available**
WPI Acc No: 1999-539484/199945
XRAM Acc No: C99-157566
XRPX Acc No: N99-399740
Catheter-based system with multiple electrodes for operating an RF

ablation generator, for endocardiac mapping and ablation for the treatment of atrial flutter and atrial fibrillation

Patent Assignee: IRVINE BIOMEDICAL INC (IRVI-N)
Inventor: CHEN P C; NGUYEN T H
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5954719	A	19990921	US 96763614	A	19961211	199945	B
			US 9846237	A	19980323		

Priority Applications (No Type Date): US 9846237 A 19980323; US 96763614 A 19961211
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5954719	A		11	A61B-017/36	CIP of application US 96763614 CIP of patent US 5782828

Abstract (Basic): US 5954719 A

NOVELTY - The software program has temperature data input and signal output capability. It sends out signals to the RF splitter (22) to control the RF energy output to each electrode in a predetermined temperature range. The sum of the total duration of the RF energy output delivered to each electrode is individually controlled.

DETAILED DESCRIPTION - The system includes a low-pass filter (19) between the **RF** splitter (22) and an external EKG monitor (20) for displaying a real-time cardiac electrical signal on the monitor. The controlling mechanism only allows ablation when the real-time signal indicates that the catheter is correctly positioned. The catheter (1) carries the electrodes at its distal end. A handle is attached to the proximal end with a steering mechanism to accurately position the catheter. A lumen extends through the catheter. A conducting wire is secured to each electrode. Temperature sensors (16) are located near to each electrode so that the temperature is constantly sensed and relayed to the controlling mechanism. The sum of the total duration of **RF** energy delivered to each electrode is approximately equal. The **RF** energy may be delivered to the electrodes either simultaneously, sequentially or randomly. The electrodes may be coils, tubes, **needles** or microporous. Fluid irrigation may be **introduced** to the lumen to diffuse out of the distal end of the catheter. The fluid may be saline, cooled saline, oxygenated saline, heparin solution, antibiotic fluid or anti-inflammatory fluid.

USE - The system is used for endocardiac mapping and ablation for the treatment of atrial flutter and atrial fibrillation.

ADVANTAGE - Applied RF energy can be controlled according to temperature.

DESCRIPTION OF DRAWING(S) - The figure shows a block diagram of the system.

Catheter (1)
Temperature sensors (16)
Low-pass filter (19)
External EKG monitor (20)
RF splitter (22)
pp; 11 DwgNo 2/5

Title Terms: CATHETER; BASED; SYSTEM; MULTIPLE; ELECTRODE; OPERATE; RF; ABLATE; GENERATOR; ENDOCARDIAC; MAP; ABLATE; TREAT; ATRIUM; FLUTTER; ATRIUM; FIBRILLATE
Derwent Class: B07; P31; S05
International Patent Class (Main): **A61B-017/36**
File Segment: CPI; EPI; EngPI

25/5/5 (Item 4 from file: 350)
DIALOG(R)File 350:Derwent WPIX

012672487 **Image available**
WPI Acc No: 1999-478594/199940
Related WPI Acc No: 1998-455949; 1999-538852; 2001-167647; 2001-342761
XRPX Acc No: N99-356323

Steerable cardiovascular catheter operation with cooled multiple-needle electrodes, for ablating intracardiac tissues and effecting plural deep and large lesions in myocardium of heart

Patent Assignee: IRVINE BIOMEDICAL INC (IRVI-N)
Inventor: CHIA W R; TU H
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5938659	A	19990817	US 97856726	A	19970515	199940	B
			US 9865230	A	19980420		

Priority Applications (No Type Date): US 97856726 A 19970515; US 9865230 A 19980420
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5938659	A		10	A61B-017/39	Div ex application US 97856726 Div ex patent US 5792140

Abstract (Basic): US 5938659 A

NOVELTY - A delivery catheter is percutaneously **introduced** into the heart chamber through a blood vessel, in which an inner catheter (2) is pushed forward to deploy multiple- **needle** electrodes (12,14). The electrodes are then positioned and abutted to a target intracardiac tissue (24) by operating on the distal section of the inner catheter. The electrodes apply **radiofrequency** to the intracardiac tissue.

DETAILED DESCRIPTION - During the application of radiofrequency, cooling fluid is either simultaneously or intermittently circulated through the openings of the needles (13,15) provided to the electrodes. The radiofrequency is supplied by a generator connected to the electrodes.

USE - For ablating intracardiac tissues and effecting plural deep and large lesions in myocardium of heart. For treating tachycardia caused by presence of arrhythmogenic site or accessory atrioventricular pathway near inner surface of heart chamber.

ADVANTAGE - Allows viewing area to be ablated beforehand, thus ensuring carrying out of ablation at appropriate location. Allows rapid and continuous viewing of target tissue.

DESCRIPTION OF DRAWING(S) - The figure shows the steerable cardiovascular catheter as it contacts intracardiac tissue.

Inner catheter (2)
Multiple-needle electrodes (12,14)
Needles (13,15)
Target intracardiac tissue (24)
pp; 10 DwgNo 5/5

Title Terms: STEER; CARDIOVASCULAR; CATHETER; OPERATE; COOLING; MULTIPLE; NEEDLE; ELECTRODE; ABLATE; INTRACARDIAC; TISSUE; EFFECT; PLURAL; DEEP; LESION; MYOCARDIUM; HEART
Derwent Class: P31
International Patent Class (Main): **A61B-017/39**
File Segment: EngPI

25/5/6 (Item 5 from file: 350)
DIALOG(R)File 350:Derwent WPIX

012650723 **Image available**
WPI Acc No: 1999-456828/199938
XRPX Acc No: N99-341605

Fail-safe needle guide mount for attachment to ultrasonic probe during surgical procedures which involves inserting needle or cannula into patient while viewing image of insertion

Patent Assignee: SIEMENS MEDICAL SYSTEMS INC (SIEI)
Inventor: BOMMARITO M W; FRIEND P J; WALSTON A L; WILLKENS M F

Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5928219	A	19990727	US 98163048	A	19980929	199938	B

Priority Applications (No Type Date): US 98163048 A 19980929
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5928219	A		23	A61B-017/00	

Abstract (Basic): US 5928219 A

NOVELTY - A knob arm (120) and a pivot arm (130), to which a gate assembly is pivotably mounted at its pivot point, are each attached at one end to the main guide body (115). The opening (180) of the gate assembly central axis allows the gate assembly to pivot freely away from the knob arm. The gate assembly includes a knob (170) and a pivot block (160).

DETAILED DESCRIPTION - The knob is movable longitudinally and rotatably on a pivot pin (145). A needle guide mount is provided for permitting the gate assembly to enter the closed position only when the central axis of the gate assembly lies less than a predetermined maximum misalignment angle, away from a correct mounting alignment axis.

USE - For attachment to ultrasonic probe during surgical procedures, which involves inserting needle or cannula into patient while viewing image of insertion, e.g. needle biopsy, drainage, amniocentesis, precision injections, cell aspiration, **radio - frequency** cauterization.

ADVANTAGE - Ensures that the main and the supporting surface are mounted securely, with a known, fixed orientation, on the probe. Ensures constant and known offsets and distances when the gate assembly is in a closed position. Ensures securing of the knob since the mating threads on the inner surface of the inner knob portion and on the post are easy to make. Ensures in-and-out movement of the knob. Eliminates the need for a separate post. Allows entire mount to be fitted over one side of and around a transducer probe.

DESCRIPTION OF DRAWING(S) - The figure shows the perspective view of the needle guide mount.

Main guide body (115)
Knob arm (120)
Pivot arm (130)
Pivot pin (145)
Pivot block (160)
Knob (170)
Opening (180)
pp; 23 DwgNo 1/8

Title Terms: FAIL; SAFE; NEEDLE; GUIDE; MOUNT; ATTACH; ULTRASONIC; PROBE; SURGICAL; PROCEDURE; INSERT; NEEDLE; CANNULA; PATIENT; VIEW; IMAGE; INSERT

Derwent Class: P31
International Patent Class (Main): **A61B-017/00**
File Segment: EngPI

25/5/7 (Item 6 from file: 350)
DIALOG(R)File 350:Derwent WPIX

011776888 **Image available**
WPI Acc No: 1998-193798/199817
XRPX Acc No: N98-153322

Invasive device for use with magnetic resonance imaging device - has RF coil at distal end of catheter inserted into body and electrically coupled to control unit

Patent Assignee: KONINK PHILIPS ELECTRONICS NV (PHIG); PHILIPS ELECTRONICS NV (PHIG); PHILIPS NORDEN AB (PHIG); US PHILIPS CORP (PHIG)
Inventor: SNELTEN J; TUITHOF H H
Number of Countries: 019 Number of Patents: 004
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9810303	A1	19980312	WO 97IB844	A	19970707	199817	B
EP 864102	A1	19980916	EP 97927332	A	19970707	199841	
			WO 97IB844	A	19970707		
US 5916162	A	19990629	US 97914595	A	19970818	199932	
JP 2000500057	W	20000111	WO 97IB844	A	19970707	200013	
			JP 98512402	A	19970707		

Priority Applications (No Type Date): EP 96202428 A 19960902
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9810303	A1	E	13	G01R-033/28	
Designated States (National): JP					
Designated States (Regional): AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE					
JP 2000500057	W		12	A61B-005/055	Based on patent WO 9810303
EP 864102	A1	E		G01R-033/28	Based on patent WO 9810303
Designated States (Regional): DE FR GB NL					
US 5916162	A			A61B-005/055	

Abstract (Basic): WO 9810303 A

The device is typically a catheter (17) which is introduced into an object. The catheter is provided with an RF coil (18) which is electrically connected (19) to a control unit (16) and an envelope (20). The catheter is typically introduced into a blood vessel of a patient by way of the distal end (21).

Instruments can be **introduced** into the catheter through the proximal end (22). The catheter includes a carrier (25) which contains a flexible material and is constructed as a **hollow** tube. The carrier is between 0.3 and 3 mm in diameter. Using suitable **RF** pulses and magnetic gradient fields the **RF** coil and a sensitive **RF** receiver in the control unit, the magnetic resonance signal is received from spins in a small volume near the coil.

ADVANTAGE - Reduces development of heat in catheter carrying instruments.

Dwg.2/6

Title Terms: INVADE; DEVICE; MAGNETIC; RESONANCE; IMAGE; DEVICE; RF; COIL; DISTAL; END; CATHETER; INSERT; BODY; ELECTRIC; COUPLE; CONTROL; UNIT
Derwent Class: P31; P34; S01; S03; S05

International Patent Class (Main): **A61B-005/055** ; G01R-033/28
International Patent Class (Additional): A61M-025/00; G01R-033/20; G01R-033/36; G01R-033/48
File Segment: EPI; EngPI

25/5/8 (Item 7 from file: 350)
DIALOG(R)File 350:Derwent WPIX

011140271 **Image available**
WPI Acc No: 1997-118195/199711
Related WPI Acc No: 1995-193919; 1996-029649; 1996-139409; 1996-208540; 1997-118194; 1997-258568; 1997-502809; 1998-239054; 1998-494593; 1999-468091; 2000-364060; 2000-440876; 2002-414467; 2003-089765; 2003-625017; 2003-786388; 2003-895630; 2003-895848; 2004-058443; 2004-675669; 2005-171774
XRPX Acc No: N97-097448

Radio Frequency apparatus - includes deflectable introducer **which is advanced in and out of distal ends of** needle **electrodes to measure temperature of tissue on ablation volume**

Patent Assignee: ZOMED INT INC (ZOME-N)
Inventor: BAKER J; EDWARDS S D; LAX R G; STRUL B
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5599346	A	19970204	US 93148439	A	19931108	199711	B
			US 94295200	A	19940824		

Priority Applications (No Type Date): US 94295200 A 19940824; US 93148439 A 19931108
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5599346	A		31	A61B-017/39	CIP of application US 93148439 CIP of patent US 5458597

Abstract (Basic): US 5599346 A

The radio frequency (RF) treatment apparatus includes a first catheter with a catheter lumen and a first catheter distal end. A first needle electrode is positioned in the first catheter lumen. An insulator sleeve is positioned in a slidable surrounding relationship to the first needle electrode to define a first needle ablation surface. A second needle electrode is inserted in a second catheter and has a second insulator sleeve. An RF power source is connected to the needle electrodes and provides RF ablation between the two needles in an ablation volume.

A deflectable introducer has a laterally deflectable distal end and an ablation volume temperature sensor positioned at the deflectable introducer distal end. The deflectable introducer distal end is advanced in and out of one of the distal ends of the needle electrodes to measure a temperature of tissue in the ablation volume. The apparatus is connected to the introducer for advancing the introducer in and out of the distal end of the electrodes.

USE/ADVANTAGE - Provides bipolar ablation between two or more electrodes. Temperature can be measured in the ablation volume ro determine extent of ablation.

Dwg.1a/13

Title Terms: RADIO; FREQUENCY; APPARATUS; DEFLECT; INTRODUCING; ADVANCE; DISTAL; END; NEEDLE; ELECTRODE; MEASURE; TEMPERATURE; TISSUE; ABLATE; VOLUME
Derwent Class: P31; S05

International Patent Class (Main): **A61B-017/39**
File Segment: EPI; EngPI

25/5/9 (Item 8 from file: 350)
DIALOG(R)File 350:Derwent WPIX

011140270 **Image available**
WPI Acc No: 1997-118194/199711
Related WPI Acc No: 1995-193919; 1996-029649; 1996-139409; 1996-208540; 1997-118195; 1997-258568; 1997-502809; 1998-239054; 1998-494593; 1999-468091; 2000-364060; 2000-440876; 2002-414467; 2003-089765; 2003-625017; 2003-786388; 2003-895630; 2003-895848; 2004-058443; 2004-675669; 2005-171774
XRPX Acc No: N97-097447
Radio frequency treatment apparatus - includes removable treatment needle **electrode, in fixed relationship to catheter, and removable** introducer **, slidable positioned in treatment** needle **lumen**
Patent Assignee: ZOMED INT INC (ZOME-N)
Inventor: BAKER J; EDWARDS S D; LAX R G; STRUL B
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5599345	A	19970204	US 93148439	A	19931108	199711	B
			US 94295166	A	19940824		

Priority Applications (No Type Date): US 94295166 A 19940824; US 93148439 A 19931108
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5599345	A		30	A61B-017/39	CIP of application US 93148439 CIP of patent US 5458597

Abstract (Basic): US 5599345 A

The radio frequency (RF) treatment apparatus includes a catheter with a catheter lumen. A removable treatment needle electrode (16) is positioned in the catheter lumen in a fixed relationship to the catheter. The treatment needle electrode has a needle lumen and a needle electrode distal end.

A removable **introducer** is slidably positioned in treatment **needle** lumen and has an **introducer** distal end. A thermal sensor (26) is positioned on the treatment electrode or the **introducer** . An **RF** power source is coupled to the treatment **needle** electrode and a return electrode. A selected power is maintained at the treatment electrode independent of changes in current or voltage.

USE/ADVANTAGE - Maintains electrode at selected power independent of changes in current and voltage.

Dwg.3/12

Title Terms: RADIO; FREQUENCY; TREAT; APPARATUS; REMOVE; TREAT; NEEDLE; ELECTRODE; FIX; RELATED; CATHETER; REMOVE; INTRODUCING; SLIDE; POSITION; TREAT; NEEDLE; LUMEN
Derwent Class: P31; S05
International Patent Class (Main): **A61B-017/39**
File Segment: EPI; EngPI

25/5/10 (Item 9 from file: 350)
DIALOG(R)File 350:Derwent WPIX

010741650 **Image available**
WPI Acc No: 1996-238605/199624
Related WPI Acc No: 1994-037124; 1994-058400; 1994-279414; 1995-006278; 1995-006284; 1995-006285; 1995-098529; 1995-200153; 1995-240431; 1995-254879; 1995-263687; 1995-344425; 1995-357865; 1996-019735; 1996-068670; 1996-068671; 1996-096969; 1996-362423; 1996-424512; 1997-164984; 1997-164985; 1997-393311; 1997-434801; 1997-434802; 1997-434803; 1997-434804; 1997-558641; 1997-558642; 1997-558643; 1997-558644; 1997-558645; 1998-018166; 1998-018167; 1998-018168; 1998-018169; 1998-018252; 1998-120291; 1998-158711; 1998-168283; 1998-216998; 1998-506432; 1998-506433; 1998-506445; 1998-520783; 1998-567504; 1999-044369; 1999-131796; 1999-131798; 1999-444300; 1999-444301; 1999-518497; 1999-518712; 1999-527406; 1999-527407; 1999-579814; 1999-600987; 2000-013328; 2000-204831; 2000-237739; 2001-060948; 2001-060949; 2001-060950; 2001-060951; 2001-060952; 2001-060953; 2001-060954; 2001-060956; 2001-112019; 2001-137545; 2001-159609; 2001-201561; 2001-326969; 2001-328305; 2001-432031; 2002-082278; 2002-088763; 2002-179338; 2002-214905; 2002-682392; 2002-696720; 2003-103019; 2003-341784; 2003-765678; 2003-776578; 2004-200457; 2004-409950; 2004-625141; 2004-774396
XRPX Acc No: N96-199791

Uvula portion ablating using radio frequencies - extending sleeve on electrode of probe and penetrating given tissue, then retracting sleeve from terminal of electrode to expose given part of latter for ablation

Patent Assignee: DOUGLASS D L (DOUG-I); EDWARDS S D (EDWA-I)
Inventor: DOUGLASS D L; EDWARDS S D
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5514131	A	19960507	US 92929638	A	19920812	199624	B
			US 9312370	A	19930202		
			US 9361647	A	19930513		
			US 9362364	A	19930513		
			US 9361072	A	19930514		
			US 94239658	A	19940509		
			US 94311097	A	19940923		

Priority Applications (No Type Date): US 94311097 A 19940923; US 92929638 A 19920812; US 9312370 A 19930202; US 9361647 A 19930513; US 9362364 A 19930513; US 9361072 A 19930514; US 94239658 A 19940509
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5514131	A		20	A61B-017/39	CIP of application US 92929638
					CIP of application US 9312370
					CIP of application US 9361647
					CIP of application US 9362364
					CIP of application US 9361072
					CIP of application US 94239658
					CIP of patent US 5370675
					CIP of patent US 5385544
					CIP of patent US 5421819
					CIP of patent US 5435805
					CIP of patent US 5456662

Abstract (Basic): US 5514131 A

The method involves providing an **RF** ablation appts including a handle, an **RF** ablation electrode with a distal end sharpened sufficiently to pierce the uvula, an advancement and retraction device coupled to the ablation electrode and an **RF** energy source coupled to the ablation **needle** . At least a portion of the **RF** ablation appts

including the ablation electrode distal end is **introduced** into a mouth cavity.

Further the method entails positioning the RF ablation appts distal end adjacent to the uvula. The RF ablation appts distal end is advanced to pierce the uvula and extend a desired distance within the uvula The RF ablation energy is then applied to the ablation electrode. An ablation lesion is then formed within the uvula and the RF ablation electrode distal end is then retracted from the uvula.

USE/ADVANTAGE - For treating uvula, tonsils, adenoids and sinus tissue. Minimises bleeding and trauma to surrounding tissues, while using disposable electrode which may be routed through nasal passages to treated tissue.

Dwg.8/23

Title Terms: PORTION; ABLATE; RADIO; FREQUENCY; EXTEND; SLEEVE; ELECTRODE; PROBE; PENETRATE; TISSUE; RETRACT; SLEEVE; TERMINAL; ELECTRODE; EXPOSE; PART; LATTER; ABLATE

Derwent Class: P31; S05

International Patent Class (Main): **A61B-017/39**

File Segment: EPI; EngPI

25/5/11 (Item 10 from file: 350)

DIALOG(R)File 350:Derwent WPIX

010711585 **Image available**

WPI Acc No: 1996-208540/199621

Related WPI Acc No: 1995-193919; 1996-029649; 1996-139409; 1997-118194; 1997-118195; 1997-258568; 1997-502809; 1998-239054; 1998-494593; 1999-468091; 2000-364060; 2000-440876; 2002-414467; 2003-089765; 2003-625017; 2003-786388; 2003-895630; 2003-895848; 2004-058443; 2004-675669; 2005-171774

XRPX Acc No: N96-174657

Coiled RF electrode treatment appts. for multi-modality treatment for tumours and tissue masses - has RF indifferent electrode having compacted, non-deployed state, and expanded deployed state, forming helical structure to conform to exterior surface of tumour with four or **less coils**

Patent Assignee: ZOMED INT (ZOME-N)

Inventor: EDWARDS S D; SHARKEY H R

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5507743	A	19960416	US 93148439	A	19931108	199621	B
			US 94291424	A	19940816		

Priority Applications (No Type Date): US 94291424 A 19940816; US 93148439 A 19931108

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5507743	A		16	A61B-017/39	CIP of application US 93148439 CIP of patent US 5458597

Abstract (Basic): US 5507743 A

The appts includes an RF indifferent electrode becoming a microwave antenna when coupled to a microwave source,

an RF active electrode, which is introduced at least partially into the tumour and the RF indifferent electrode introduced in a surrounding relationship to the tumour prior to supplying RF energy to the electrodes, and deployment appts. for deploying RF indifferent electrode from non-deployed state.

RF ablation energy is delivered to the tumour by the **RF** active electrode after it has been **introduced** into the tumour. Both electrodes are coupled to an **RF** energy source. The indifferent electrode is coupled to a microwave source. Either or both of the electrodes is **hollow** and include fluid distribution ports for providing a chemotherapeutic agent to the tumour site. Ablation energy is supplied to the tumour by the active electrode. The **RF** indifferent electrode then is switched and becomes a microwave antenna, providing hyperthermia to the tumour and surrounding area.

USE/ADVANTAGE - RF treatment appts. that ablates tumours, provides hyperthermia and introduces chemotherapeutic agent to tumour site and its surrounding tissue and area.

Dwg.4B/8

Title Terms: COIL; RF; ELECTRODE; TREAT; APPARATUS; MULTI; TREAT; TUMOUR; TISSUE; MASS; RF; INDIFFERENT; ELECTRODE; COMPACT; NON; DEPLOY; STATE; EXPAND; DEPLOY; STATE; FORMING; HELICAL; STRUCTURE; CONFORM; EXTERIOR; SURFACE; TUMOUR; FOUR; LESS; COIL

Derwent Class: P31; S05

International Patent Class (Main): **A61B-017/39**

File Segment: EPI; EngPI

25/5/12 (Item 11 from file: 350)

DIALOG(R)File 350:Derwent WPIX

010532695 **Image available**

WPI Acc No: 1996-029649/199603

Related WPI Acc No: 1995-193919; 1996-139409; 1996-208540; 1997-118194; 1997-118195; 1997-258568; 1997-502809; 1998-239054; 1998-494593; 1999-468091; 2000-364060; 2000-440876; 2002-414467; 2003-089765; 2003-625017; 2003-786388; 2003-895630; 2003-895848; 2004-058443; 2004-675669; 2005-171774

XRPX Acc No: N96-025182

Treating body tissues contg. cancerous cells and non-malignant tumours - supplying RF power to electrode surface of stylet to produce diffusion barrier capsule at tissue treatment site

Patent Assignee: ZOMED INT (ZOME-N)

Inventor: EDWARDS S D; LAX R G

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5472441	A	19951205	US 93148439	A	19931108	199603	B
			US 94208676	A	19940311		

Priority Applications (No Type Date): US 94208676 A 19940311; US 93148439 A 19931108

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5472441	A		28	A61B-017/36	CIP of application US 93148439 CIP of patent US 5458597

Abstract (Basic): US 5472441 A

The method involves **introducing** a stylet comprising an electrode surface and a sleeve longitudinally moveable on it into the vicinity of the body tissues, retracting the sleeve from a portion of the electrode surface, and supplying **RF** power to the electrode surface sufficient to heat the tissue to a temperature of above about 45 deg. C. for a time to cause reduction of tissue mass in the vicinity of the electrode. The **RF** power supplied to the electrode surface is

sufficient to effect a desiccated fluid diffusion barrier capsule surrounding the body tissue being treated. The stylet can include a **hollow** tube having fluid distribution ports in it, and fluid is passed through one or more distribution ports into the body tissue being treated.

The fluid can be saline or a chemotherapeutic fluid such as liquid or gas containing a cytotoxic agent, for example. The fluid can be **administered** in a variety of procedures. The fluid can be passed through a distribution port into the body tissue before, during and/or after the **RF** power is supplied to the electrode surface, for example. Preferably, the fluid is **introduced** after a barrier capsule has been formed. The device comprises electrodes having a **hollow** core and a closed sharpened distal tip. The electrode has a number of fluid distribution ports in it for distribution of fluid treatment agents into the tissue.

ADVANTAGE - Stimulates reduction of neoplastic cells in organ or body tissue by RF ablation, alone or in combination with systematic or localised chemotherapy.

Dwg.7/22

Title Terms: TREAT; BODY; TISSUE; CONTAIN; CANCER; CELL; NON; MALIGNANT; TUMOUR; SUPPLY; RF; POWER; ELECTRODE; SURFACE; STYLET; PRODUCE; DIFFUSION ; BARRIER; CAPSULE; TISSUE; TREAT; SITE
Derwent Class: P31; S05
International Patent Class (Main): **A61B-017/36**
File Segment: EPI; EngPI

25/5/13 (Item 12 from file: 350)
DIALOG(R)File 350:Derwent WPIX

010245408 **Image available**
WPI Acc No: 1995-146663/199519
Related WPI Acc No: 1994-255126; 1996-276677
XRPX Acc No: N95-115180

Electro-coagulation and ablation catheter for internal body tissue - has electrically conductive needle connected to conductor extending within catheter body for coupling to RF generator, needle and electrode establishing bipolar RF electro-coagulation path through selected region of body tissue

Patent Assignee: BOSTON SCI CORP (BOST-N)
Inventor: ABELE J E; ROWE S; ROWLAND C A; VERGANO M G
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5403311	A	19950404	US 9338903	A	19930329	199519	B

Priority Applications (No Type Date): US 9338903 A 19930329
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5403311	A		13	A61B-017/39	

Abstract (Basic): US 5403311 A

A flexible, pushable, elongated catheter body of braided construction has proximal and distal portions terminating respectively at proximal and distal ends defining a tube-receiving lumen having a length that extends from the proximal end of the catheter body to the distal end of the catheter body. The length is selected to perform therapy on selected regions of body tissue within the gastrointestinal tract or the oesophagus of a patient while the proximal end of the catheter body remains outside the patient.

An **RF** electrocoagulation electrode coupled to the distal portion of the catheter body, is connected to a respective conductor extending within the catheter body. A retractable, flexible **hollow** tube having a tissue-penetrable **needle** -form distal end and having a proximal end extends within the tube-receiving lumen and along the entire length. The flexible **hollow** tube has a fluid passage through it for **introducing** a fluid into the tissue in the selected region, and is selectively slidable within the tube-receiving lumen of the catheter body to cause the **needle** -form distal end of the flexible tube to be projectable from and retractable into the distal end.

USE/ADVANTAGE - Electrode can be used to provide mapping function inside cardiac chambers. retractable probe acts as anchor to provide greater positional stability for various positions and angles during mapping and ablation procedure.

Dwg.3/10

Title Terms: ELECTRO; COAGULATE; ABLATE; CATHETER; INTERNAL; BODY; TISSUE; ELECTRIC; CONDUCTING; NEEDLE; CONNECT; CONDUCTOR; EXTEND; CATHETER; BODY; COUPLE; RF; GENERATOR; NEEDLE; ELECTRODE; ESTABLISH; BIPOLAR; RF; ELECTRO ; COAGULATE; PATH; THROUGH; SELECT; REGION; BODY; TISSUE

Index Terms/Additional Words: ELECTRO; COAGU

Derwent Class: P31; S05

International Patent Class (Main): **A61B-017/39**

File Segment: EPI; EngPI

25/5/14 (Item 13 from file: 350)

DIALOG(R)File 350:Derwent WPIX

009449961 **Image available**

WPI Acc No: 1993-143486/199317

Related WPI Acc No: 1992-040838; 1993-142786

XRPX Acc No: N93-109482

Surgical instrument for eye vitreous humor - includes tubular conductors separated by insulator to apply coagulating electrical current to needle tip

Patent Assignee: SURGICAL TECHNOLOGIES INC (SURG-N)

Inventor: EASLEY J C; GAMPP K W; SCHELLER G D

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5203353	A	19930420	US 89425936	A	19891024	199317	B
			US 92816802	A	19920103		

Priority Applications (No Type Date): US 89425936 A 19891024; US 92816802 A 19920103

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5203353	A		11	A61B-017/36	Div ex application US 89425936 Div ex patent US 5078712

Abstract (Basic): US 5203353 A

A rigid needle extends from a finger grip member, with a single continuous fibre optic member extending from a distal end of the needle through the needle and the finger grip member to a cone shaped proximal end contained in a large connecting member constructed at heat conductive material. The surgical instrument includes a stripping tool at its distal end that is bent at a right angle and positioned in a plane that is parallel to the longitudinal axis of the needle but does not intersect this axis.

The surgical instrument also comprises an infusion/aspiration system including a hollow pipe attached to the needle that extends parallel to the longitudinal axis of the needle but does nto interfere with a beam of light projected from the distal end of the fibre optic member extending through the needle. The instrument also includes a coaxial bipolar diathermy comprising an exterior needle surrounding and coaxial to the fibre optic needle. The exterior needle is insulated from the interior fibre optic needle, both needles being electrically connected to a conventional **radio frequency** generator for creating an electric potential between the distal ends of the interior and exterior **needles** for use in coagulating bleeding vessels on a retinal surface or beneath pre-retinal membranes.

USE - Surgical instrument for use in penetrating and working in the vitreous humor of an eye.

Dwg.8/17

Title Terms: SURGICAL; INSTRUMENT; EYE; VITREOUS; HUMOR; TUBE; CONDUCTOR; SEPARATE; INSULATE; APPLY; COAGULATE; ELECTRIC; CURRENT; NEEDLE; TIP

Derwent Class: P31; S05; V07

International Patent Class (Main): **A61B-017/36**

File Segment: EPI; EngPI

?

28/5/1 (Item 1 from file: 347)
DIALOG(R)File 347:JAPIO

06530892 **Image available**
MR ENDOSCOPE

PUB. NO.: 2000-116615 [JP 2000116615 A]
PUBLISHED: April 25, 2000 (20000425)
INVENTOR(s): MORI KAZUO
APPLICANT(s): TOSHIBA CORP
APPL. NO.: 10-288456 [JP 98288456]
FILED: October 09, 1998 (19981009)
INTL CLASS: **A61B-005/055** ; **A61B-001/00**

ABSTRACT

PROBLEM TO BE SOLVED: To obtain an MRI of higher quality inside a subject by inserting an FR coil having a proper sensitivity area into the subject.

SOLUTION: This MRI endoscope is provided with the body of an endoscope having an inserting part **introducable** into a subject and an **RF** coil provided at the inserting part to receive a nuclear magnetic resonance signal. In this case, the inserting part is provided with electrostatistic capacitance carriers Ct1, C1, Ct2 and D1 composing a tuning circuit for an application frequency together with the RF coil and a preamplifier (PA) 501 to amplify an output signal of the tunning circuit.

28/5/2 (Item 2 from file: 347)
DIALOG(R)File 347:JAPIO

06484802 **Image available**
ELECTRIC COAGULATING DEVICE

PUB. NO.: 2000-070382 [JP 2000070382 A]
PUBLISHED: March 07, 2000 (20000307)
INVENTOR(s): EIN-GAL MOSHE
APPLICANT(s): EIN-GAL MOSHE
APPL. NO.: 11-243291 [JP 99243291]
FILED: August 30, 1999 (19990830)
PRIORITY: 125990 [IL 125990], IL (Israel), August 30, 1998 (19980830)
INTL CLASS: A61N-001/06; **A61B-018/12**

ABSTRACT

PROBLEM TO BE SOLVED: To provide a new device and method for electric coagulation.

SOLUTION: This electric coagulating device 10 is provided with an array comprising more than two **RF** energized type **needles** 12, and an **RF** generator 28 selectively energizing at least two **needles** 12 so that energy flows between these needles 12. The needles 12 are arranged in the form of rows, and these rows are alternately arranged. To be changeable, the needles 12 are arranged in the form of matrix formed of rows and columns. The needles 12 are spaced from one another almost at equal spaces or arranged irregularly, preferably spaced from one another corresponding to the width of veins 22.

28/5/12 (Item 1 from file: 350)

013605649 **Image available**
WPI Acc No: 2001-089857/200110
Related WPI Acc No: 1997-165059; 1997-165061; 1997-258568; 1997-258569; 1997-424707; 1997-470595; 1997-488764; 1997-488765; 1998-239054; 1998-426817; 1998-494593; 1999-131171; 1999-337443; 1999-357529; 1999-384134; 1999-428991; 1999-443090; 1999-526902; 1999-633262; 2000-364060; 2000-375207; 2000-451177; 2002-361047; 2003-298306; 2004-058308; 2004-223850; 2005-079016
XRPX Acc No: N01-068018

Cell necrosis apparatus for treatment of tumors

Patent Assignee: RITA MEDICAL SYSTEMS INC (RITA-N); GOUGH E J (GOUG-I)
Inventor: GOUGH E J
Number of Countries: 002 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6132425	A	20001017	US 95515379	A	19950815	200110 B
			US 96605323	A	19960214	
			US 97963239	A	19971103	
			US 9820182	A	19980206	
TW 402498	A	20000821	TW 99115065	A	19990901	200117

Priority Applications (No Type Date): US 9820182 A 19980206; US 95515379 A 19950815; US 96605323 A 19960214; US 97963239 A 19971103; US 9847845 A 19980325; US 98148571 A 19980904
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6132425	A		17	A61B-017/36	CIP of application US 95515379
					CIP of application US 96605323
					CIP of application US 97963239
					CIP of patent US 5683384
					CIP of patent US 5728143
TW 402498	A			A61B-017/39	

Abstract (Basic): US 6132425 A

NOVELTY - Cell necrosis apparatus (10) has a flexible introducer (14) including a lumen and a distal end sharp enough to penetrate tissue, the introducer being flexible enough to exhibit a change in direction of travel as it penetrates the tissue, an energy delivery device including a first and second **RF** electrode being positionable in the **introducer** as it is advanced through tissue and deployable with curvature from the introducer.

USE - This apparatus is to be used to treat tumors with RF electro-ablation.

ADVANTAGE - The introducer is advancable through or around a selected target cell necrosis mass, and be flexibly positioned at any desired site in the tissue. The introducer is flexible enough to come back on itself.

DESCRIPTION OF DRAWING(S) - The drawing shows a perspective view of the cell necrosis apparatus of the present invention showing the flexibility of the introducer.

Energy delivery device (16)
Cell necrosis apparatus (10)
Introducer (14)
Insulative sleeve (18)

Electromagnetic energy source (20)
Cables (22)
pp; 17 DwgNo 1/10
Title Terms: CELL; NECROSIS; APPARATUS; TREAT; TUMOUR
Derwent Class: P31; S05
International Patent Class (Main): **A61B-017/36 ; A61B-017/39**
File Segment: EPI; EngPI

28/5/13 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX

013585454 **Image available**
WPI Acc No: 2001-069661/200108
XRPX Acc No: N01-052627
Tissue ablation procedure for treatment of benign prostatic hyperplasia, involves irradiating appropriate RF or microwave band onto target tissue along with injection of biocompatible fluid
Patent Assignee: NICHOLSON J E (NICH-I)
Inventor: NICHOLSON J E
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 6131577	A	20001017	US 97841273	A	19970429	200108	B

Priority Applications (No Type Date): US 97841273 A 19970429
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6131577	A		8	A61B-019/00	

Abstract (Basic): US 6131577 A
NOVELTY - A biocompatible fluid containing an aqueous solution of ionizing salt is **injected** onto the target tissue along with **radio frequency** (**RF**) or microwave absorption frequency band radiation. The RF or microwave is irradiated so that the radiation energy is absorbed by tissue, relative to the volume of tissue.
USE - For treatment of benign prostatic hyperplasia (BPH) and preventing non-malignant tissue growth in prostrate gland of urethra in men. Also for tissue treatment in animals.
ADVANTAGE - Enhances selective absorption of microwave energy, by using compounds which perfuse target tissue selectively.
DESCRIPTION OF DRAWING(S) - The figure shows the antenna radiating energy into target tissue.
pp; 8 DwgNo 3/3
Title Terms: TISSUE; ABLATE; PROCEDURE; TREAT; BENIGN; PROSTATE; HYPERPLASIA; IRRADIATE; APPROPRIATE; RF; MICROWAVE; BAND; TARGET; TISSUE; INJECTION; BIOCOMPATIBLE; FLUID
Derwent Class: P31; S05
International Patent Class (Main): **A61B-019/00**
File Segment: EPI; EngPI

28/5/15 (Item 4 from file: 350)
DIALOG(R)File 350:Derwent WPIX

013531336 **Image available**
WPI Acc No: 2001-015542/200102
XRPX Acc No: N01-011824

Treating apparatus of stenosis or blockage in artery, has radio frequency wire with passage way for delivering fluid to hole bored in tissue

Patent Assignee: SUN STAR TECHNOLOGY INC (SUNS-N)
Inventor: HEUSER R R
Number of Countries: 089 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200051512	A1	20000908	WO 2000US5133	A	20000229	200102	B
AU 200033847	A	20000921	AU 200033847	A	20000229	200102	

Priority Applications (No Type Date): US 99260187 A 19990301
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200051512	A1	E	43	A61B-018/18	

Designated States (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW

AU 200033847	A		A61B-018/18	Based on patent WO 200051512

Abstract (Basic): WO 200051512 A1

NOVELTY - A controller with a generator generates and delivers radio frequency (RF) energy along output lines. The RF wire having a tip with narrow portion (134) is placed adjacent to bodily tissues. The controller delivers sufficient RF energy to the wire tip to bore a hole in the tissue. The wire has a passage way (120) and openings (138) at narrow portion for delivering fluid adjacent to the hole.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for method for treating an internal tissue of a patient's body.

USE - In catheterized treatment of stenosis or blockage in bodily passages like artery, etc. Used in creating holes or channels in a hyperfused area of a heart for delivering gene therapy medicine to promote revascularization.

ADVANTAGE - Optimal position in a bodily passage way for the treatment of a stenosis is located by the controller. The chances of reoccurrence in the treatment of a stenosis are reduced by selecting the optimum position and delivering optimum RF energy by impedance matching.

DESCRIPTION OF DRAWING(S) - The figure shows the pictorial view of **RF** wire with a narrowing portion culminating in a **needle** point with a closed distal end and a series of opening spaced along and about the narrowing portion of the wire.

Output lines (40a,40b)
Radio frequency wire (90)
Passage way (120)
Needle portions (134)
Openings (138)
pp; 43 DwgNo 9/11

Title Terms: TREAT; APPARATUS; STENOSIS; BLOCK; ARTERY; RADIO; FREQUENCY; WIRE; PASSAGE; WAY; DELIVER; FLUID; HOLE; BORE; TISSUE
Derwent Class: P31; S05; T01
International Patent Class (Main): **A61B-018/18**
File Segment: EPI; EngPI

28/5/16 (Item 5 from file: 350)
DIALOG(R)File 350:Derwent WPIX

013465489 **Image available**
WPI Acc No: 2000-637432/200061
Related WPI Acc No: 2000-328672
XRPX Acc No: N00-472727

Transmyocardial revascularization for treating ischemia and angina, involves creating reversible tissue damage areas around needle penetrated into myocardial tissue by applying RF energy and microwave energy

Patent Assignee: HEARTEN MEDICAL INC (HEAR-N)
Inventor: LAUFER M D; NGUYEN H V; STAMBAUGH B D
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 6106520	A	20000822	US 9760540	A	19970930	200061	B
			US 98163849	A	19980930		

Priority Applications (No Type Date): US 9760540 P 19970930; US 98163849 A 19980930
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6106520	A		7	A61B-018/04	Provisional application US 9760540

Abstract (Basic): US 6106520 A

NOVELTY - A needle (20) inserted via ventricle tissue to interior of heart, penetrates the myocardial tissue of heart. The myocardial tissue surrounding the **needle** is heated by **RF** energy, microwave energy or by resistive heating of **needle** , at 40-60degreesC for 5-120 seconds, to create reversible tissue damage areas. The needle is inserted and removed for predefined times, to form several reversible tissue damage areas.

USE - For creating holes in heart tissue during treatment of angina and heart ischemia.

ADVANTAGE - By heating the myocardial tissue by applying energy to the needle, reverse tissue damage area is created which in turn causes angiogenesis and arteriogenesis and thereby resulting in improved tissue perfusion and the patient with chronic ischemia and angina, experiences less pain.

DESCRIPTION OF DRAWING(S) - The figure shows the cross-sectional view of left ventricle of heart with surgical device for creating holes in heart tissue.

Needle (20)

pp; 7 DwgNo 1/3

Title Terms: TREAT; ANGINA; REVERSE; TISSUE; DAMAGE; AREA; NEEDLE; PENETRATE; MYOCARDIUM; TISSUE; APPLY; RF; ENERGY; MICROWAVE; ENERGY
Derwent Class: P31; S05
International Patent Class (Main): **A61B-018/04**
File Segment: EPI; EngPI

28/5/21 (Item 10 from file: 350)
DIALOG(R)File 350:Derwent WPIX

012898163
WPI Acc No: 2000-069998/200006
XRPX Acc No: N00-054608

Method of treating pain syndrome in coxalgic arthrosis and arthrosis of knee-joint by transdermal radio-frequency destruction of closing nerve

Patent Assignee: AKATOV O V (AKAT-I)
Inventor: AKATOV O V

Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
RU 2117451	C1	19980820	RU 96123114	A	19961210	200006	B

Priority Applications (No Type Date): RU 96123114 A 19961210
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
RU 2117451	C1			A61B-017/36	

Abstract (Basic): RU 2117451 C1

NOVELTY - **Radio - frequency** electrode is **introduced** transdermally and closing nerve in its section coming out of small pelvis is thermally destroyed. Closing groove of pubic bone serves as roentgenological reference point for above-mentioned section.

USE - Traumatology.

ADVANTAGE - Reduced tissue traumatism.

pp; 0 DwgNo 0/0

Title Terms: METHOD; TREAT; PAIN; SYNDROME; ARTHROSIS; ARTHROSIS; KNEE; JOINT; TRANSDERMAL; RADIO; FREQUENCY; DESTROY; CLOSE; NERVE
Derwent Class: P31
International Patent Class (Main): **A61B-017/36**
File Segment: EngPI

28/5/22 (Item 11 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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012827030 **Image available**
WPI Acc No: 1999-633262/199954
Related WPI Acc No: 1997-165059; 1997-165061; 1997-258568; 1997-258569; 1997-424707; 1997-470595; 1997-488764; 1997-488765; 1997-502809; 1998-239054; 1998-426817; 1998-494593; 1999-131171; 1999-337443; 1999-357529; 1999-384134; 1999-428991; 1999-443090; 1999-468091; 1999-526902; 2000-270956; 2000-270957; 2000-364060; 2000-375207; 2000-440876; 2000-451177; 2001-089857; 2002-361047; 2003-089765; 2003-298306; 2003-625017; 2003-786388; 2003-895630; 2003-895848; 2004-058308; 2004-058443; 2004-223850; 2004-675669; 2005-079016; 2005-171774
XRPX Acc No: N99-467616

Energy delivery apparatus for cell necrosis apparatus used for cutting tumor

Patent Assignee: RITA MEDICAL SYSTEMS INC (RITA-N)
Inventor: GOUGH E J
Number of Countries: 002 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5980517	A	19991109	US 95515379	A	19950815	199954	B
			US 97963239	A	19971103		
			US 9820182	A	19980206		
			US 9847845	A	19980325		
TW 402498	A	20000821	TW 99115065	A	19990901	200117	

Priority Applications (No Type Date): US 9847845 A 19980325; US 95515379 A 19950815; US 97963239 A 19971103; US 9820182 A 19980206; US 98148571 A 19980904
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5980517	A		18	A61B-017/39	CIP of application US 95515379
					CIP of application US 97963239

CIP of application US 9820182
CIP of patent US 5683384

TW 402498 A A61B-017/39

Abstract (Basic): US 5980517 A

NOVELTY - A pair of **RF** electrodes (16) are positioned in the **introducer** (14) and is deployed with specific curvature in the expanded state of the **introducer** . **RF** electrode (17) positioned in the **introducer** is deployed from the **introducer** with other **RF** electrodes.

DETAILED DESCRIPTION - The introducer has an end that is sharp enough to penetrate tissue. An insulator surrounds a portion of the **introducer** . A thermal sensor (24) is connected to the specific **RF** electrode.

USE - For advancing through tissue so as to cut cancerous growth such as tumor.

ADVANTAGE - The introducer is sufficiency sharp to penetrate tissue at selected anatomical sites. The energy deliver device can be appropriately positioned in the **introducer** as the **introducer** advance through the tissue. The **RF** electrodes are deployed from the **introducer** with different curvature.

DESCRIPTION OF DRAWING(S) - The figure shows illustrates the perspective view of the cell necrosis apparatus.

Introducer (14)
RF electrodes (16,17)
Thermal sensor (24)
pp; 18 DwgNo 1/10

Title Terms: ENERGY; DELIVER; APPARATUS; CELL; NECROSIS; APPARATUS; CUT; TUMOUR
Derwent Class: P31; S05
International Patent Class (Main): **A61B-017/39**
File Segment: EPI; EngPI

28/5/24 (Item 13 from file: 350)
DIALOG(R)File 350:Derwent WPIX

012784075 **Image available**
WPI Acc No: 1999-590301/199950
XRPX Acc No: N99-435363
RF (radio frequency) electrode assembly for surgical ablation apparatus
Patent Assignee: VIDA CARE INC (VIDA-N)
Inventor: EDWARDS S D
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5968041	A	19991019	US 9854030	A	19980402	199950	B

Priority Applications (No Type Date): US 9854030 A 19980402
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5968041	A		8	A61B-017/39	

Abstract (Basic): US 5968041 A

NOVELTY - The apparatus comprises an **introducer** (20) with a tissue piercing tip containing a central **RF** electrode (18) between a pair of electrodes (16), all with tissue piercing tips. When introduced to the desired site, the electrodes are advanced from the introducer, whereby the electrode pair (16) expand to surround the target tissue

(24) into which the central electrode (18) has been inserted.
USE - For minimally invasive surgical ablation apparatus.
ADVANTAGE - Provides an apparatus which is capable of directional delivery of RF energy to a target tissue site in deep body tissue, and which can operate in both bipolar and monopolar modes.
DESCRIPTION OF DRAWING(S) - The drawing show the electrodes deployed around a target tissue site.
Electrode pair (16)
Central electrode (18)
Introducer (20)
Target tissue (24)
pp; 8 DwgNo 2/7

Title Terms: RF; RADIO; FREQUENCY; ELECTRODE; ASSEMBLE; SURGICAL; ABLATE; APPARATUS
Derwent Class: P31; S05
International Patent Class (Main): **A61B-017/39**
File Segment: EPI; EngPI

28/5/26 (Item 15 from file: 350)
DIALOG(R)File 350:Derwent WPIX

012661986 **Image available**
WPI Acc No: 1999-468091/199939
Related WPI Acc No: 1995-193919; 1996-029649; 1996-139409; 1996-208540; 1997-118194; 1997-118195; 1997-165059; 1997-165061; 1997-258569; 1997-424707; 1997-470595; 1997-488764; 1997-488765; 1997-502809; 1998-426817; 1998-494593; 1999-131171; 1999-337443; 1999-357529; 1999-384134; 1999-428991; 1999-443090; 1999-526902; 1999-633262; 2000-270956; 2000-270957; 2000-364060; 2000-375207; 2000-440876; 2000-451177; 2002-414467; 2003-089765; 2003-298306; 2003-625017; 2003-786388; 2003-895630; 2003-895848; 2004-058308; 2004-058443; 2004-223850; 2004-675669; 2005-079016; 2005-171774
XRPX Acc No: N99-349485
RF **treatment apparatus for multi-modality treatment using** infusion **delivery device**
Patent Assignee: RITA MEDICAL SYSTEMS INC (RITA-N)
Inventor: BAKER J; EDWARDS S D; LAX R G; STRUL B
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5935123	A	19990810	US 93148439	A	19931108	199939	B
			US 94295166	A	19940824		
			US 96623652	A	19960329		

Priority Applications (No Type Date): US 94295166 A 19940824; US 93148439 A 19931108; US 96623652 A 19960329
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5935123	A		35	A61B-017/39	CIP of application US 93148439
					Div ex application US 94295166
					CIP of patent US 5458597
					Div ex patent US 5599345

Abstract (Basic): US 5935123 A
NOVELTY - An elongated delivery device with a tissue piercing distal and proximal ends, is provided. RF electrode is positioned in the delivery device. An electrode advancing unit is coupled to the RF electrode and handpiece which is coupled to the proximal end of the elongated delivery device.

DETAILED DESCRIPTION - The RF electrode (16) has non- deployed state when it is positioned in the delivery device and deployed state when it is advanced from the delivery device into selected tissue site.

USE - For treating tumors using catheter, removable electrode, insulator sleeve, etc.

ADVANTAGE - Inhibits removal of RF electrode from elongated delivery device by closing handpiece having proximal end, sufficiently.

DESCRIPTION OF DRAWING(S) - The figure shows exploded view of RF treatment apparatus.

RF electrode (16)

pp; 35 DwgNo 2/15

Title Terms: RF; TREAT; APPARATUS; MULTI; TREAT; INFUSION; DELIVER; DEVICE
Derwent Class: P31; S05
International Patent Class (Main): **A61B-017/39**
File Segment: EPI; EngPI

28/5/27 (Item 16 from file: 350)
DIALOG(R)File 350:Derwent WPIX

012470452 **Image available**
WPI Acc No: 1999-276560/199923
Related WPI Acc No: 1997-457278; 1999-571962; 2000-223353
XRPX Acc No: N99-207304

Endocardial tissue ablator of linear lesion ablation catheter - has permeable foam segments through which conductive fluid is injected, forming conductive path between electrode surrounding baffle wire and infusion tube, and body tissue

Patent Assignee: CARDIAC PATHWAYS CORP (CARD-N)
Inventor: ANDERSON S C; CHAPMAN T J; POMERANZ M L; SHERMAN D R; TEDDER S
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5895417	A	19990420	US 96611656	A	19960306	199923	B
			US 97965353	A	19971106		

Priority Applications (No Type Date): US 97965353 A 19971106; US 96611656 A 19960306
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5895417	A		38	A61B-017/39	CIP of application US 96611656
					CIP of patent US 5800482

Abstract (Basic): US 5895417 A

NOVELTY - Baffle wire (14) and infusion tube (36) with sealed end (37) and tiny holes (38) are provided in the ablation section. Permeable foam segments (42) covered by heat shrinking tube (44) with holes (46), surround electrodes (40) around tube and wire. Conductive fluid injected to ablation section via foam segments, forms conductive path between electrode and body tissue. DETAILED DESCRIPTION - The baffle wire has an elongated metallic core wire (20) which is encased in a thin tube (21). The ablation section is positioned adjacent to the tissues to be ablated. **RF** energy is delivered to the electrode. The saline through the **infusion** tube is ejected through the hole (38). The saline permeating through the foam contacts the electrodes and the tissues to improve coupling of RF energy to the tissue and increases ablation efficiency. An INDEPENDENT CLAIM is also included for a method of forming linear lesion within heart. METALLURGY - The metallic core wire of the baffle wire is made of stainless steel or shape memory

metal such as Nitinol.POLYMERS - The tube surrounding metallic core wire of baffle wire is made of materials such as polyolefin, nylon, thermoplastic polymer, silicone or polyurethane.

USE - In linear lesion ablation catheter used in treatment of atrial fibrillation.

ADVANTAGE - The saline cools the electrodes as well as decreases formation of thrombus on electrodes. The effectiveness of catheter being held securedly against tissues and the RF energy focusing on tissues are improved by saline contacts between electrode and tissue. Provides flexibility and maneuverability in locating ablation section.

DESCRIPTION OF DRAWING(S) - The drawings show cross sectional view of ablation section of linear lesion catheter and sectional view of baffle wire. (14) Baffle wire; (20) Metallic core wire; (21) Thin tube; (36) Infusion tube; (37) Sealed end; (38,46) Holes; (40) Electrode; (42) Foam segments; (44) Heat shrinking tube.

Dwg.3,4/23

Title Terms: ENDOCARDIAC; TISSUE; ABLATE; LINEAR; LESION; ABLATE; CATHETER; PERMEABLE; FOAM; SEGMENT; THROUGH; CONDUCTING; FLUID; INJECTION; FORMING; CONDUCTING; PATH; ELECTRODE; SURROUND; BAFFLE; WIRE; INFUSION; TUBE; BODY ; TISSUE

Derwent Class: P31; S05

International Patent Class (Main): **A61B-017/39**

File Segment: EPI; EngPI

28/5/28 (Item 17 from file: 350)

DIALOG(R)File 350:Derwent WPIX

012298372

WPI Acc No: 1999-104478/199909

XRPX Acc No: N99-075401

Cardiac tissue reduction method - involves using catheter-based form of RF ablation combined with known technologies of temperature control, saline injection **and screw-in electrode know how**

Patent Assignee: ANONYMOUS (ANON)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
RD 417061	A	19990110	RD 98417061	A	19981220	199909	B

Priority Applications (No Type Date): RD 98417061 A 19981220

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
RD 417061	A		1	A61B-000/00	

Abstract (Basic): RD 417061 A

The method involves inserting a catheter into the femoral artery and through the aortic valve of a patient's heart. The catheter has a screw-in electrode with small holes to dispense a conductive fluid such as saline. The electrode is attached to obstructing tissue and radio frequency (RF) energy is applied sufficiently to shrink the tissue over time.

USE - For the specific problems of IHSS or the obstruction of the aortic valve with an enlarged ventricle septum.

ADVANTAGE - Avoids a costly surgical procedure. Eliminates the need for an implantable pacemaker. Avoids clinical complications such as blood flow obstruction or arrhythmia that results in heart failure, syncope and other clinical manifestations of cardiac insufficiency, in the most clinically and cost effective way.

Dwg.0/0

Title Terms: CARDIAC; TISSUE; REDUCE; METHOD; CATHETER; BASED; FORM; RF; ABLATE; COMBINATION; TEMPERATURE; CONTROL; SALINE; INJECTION; SCREW; ELECTRODE
Derwent Class: P31; S05
International Patent Class (Main): **A61B-000/00**
File Segment: EPI; EngPI

28/5/29 (Item 18 from file: 350)
DIALOG(R)File 350:Derwent WPIX

012103118 **Image available**
WPI Acc No: 1998-520030/199844
Related WPI Acc No: 1995-106631
XRPX Acc No: N98-406182

Prostate ablation catheter system - applies fluid into prostate through lumen along with application energy through conductor, which is connected to RF generator

Patent Assignee: MEDTRONIC INC (MEDT)
Inventor: HOEY M F; MULIER P M J
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5807395	A	19980915	US 93113441	A	19930827	199844	B
			US 95394691	A	19950222		
			US 97837737	A	19970422		

Priority Applications (No Type Date): US 95394691 A 19950222; US 93113441 A 19930827; US 97837737 A 19970422
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5807395	A		38	A61B-017/39	CIP of application US 93113441 Cont of application US 95394691 CIP of patent US 5431649

Abstract (Basic): US 5807395 A

The system comprises fluid conducting lumen and electrical conductor which are extended through an elongate catheter body. A hollow electrode is installed at distal end of the catheter body and is in fluid communicated with the lumen. The hollow electrode is electrically connected with the electrical conductor. An elongate needle with distal fluid port is connected to electrode.

A balloon is installed around the needle over one proximal fluid port. The balloon is inflated by the fluid sucked by the **needle** . An **RF** generator is coupled with one conductor. The conductive fluid is supplied to the prostate through lumen, with the application of energy from the generator via the conductor.

USE - For ablation or hyperthermia of body tissue, tumor site of prostate, breast, brain, neck, lung, hymphoid region, esophagus, gastric mass, pancreas, liver, small and large intestines, colon, ovaries, testis, pelvic regions, oral cavity, larynx, bladder, kidney, muscle.

ADVANTAGE - Controls thermal production intensity in ablation area. Facilitates repeated treatment of site within body using fluid assisted technique.

Dwg.19/42

Title Terms: PROSTATE; ABLATE; CATHETER; SYSTEM; APPLY; FLUID; PROSTATE; THROUGH; LUMEN; APPLY; ENERGY; THROUGH; CONDUCTOR; CONNECT; RF; GENERATOR
Derwent Class: P31; S05
International Patent Class (Main): **A61B-017/39**

File Segment: EPI; EngPI

28/5/30 (Item 19 from file: 350)
DIALOG(R)File 350:Derwent WPIX

011751373 **Image available**
WPI Acc No: 1998-168283/199815
Related WPI Acc No: 1992-332087; 1994-037124; 1994-058400; 1994-233389; 1994-279414; 1995-006278; 1995-006284; 1995-006285; 1995-098529; 1995-200153; 1995-240431; 1995-254879; 1995-263687; 1995-344425; 1995-350622; 1995-357865; 1996-019735; 1996-057376; 1996-068670; 1996-068671; 1996-096969; 1996-117359; 1996-238605; 1996-362423; 1996-424512; 1997-164984; 1997-164985; 1997-288472; 1997-393311; 1997-434801; 1997-434802; 1997-434803; 1997-434804; 1997-488752; 1997-558038; 1997-558641; 1997-558642; 1997-558643; 1997-558644; 1997-558645; 1998-018166; 1998-018167; 1998-018168; 1998-018169; 1998-018252; 1998-120291; 1998-158711; 1998-216998; 1998-506432; 1998-506433; 1998-506445; 1998-520783; 1998-567504; 1999-044369; 1999-131796; 1999-131798; 1999-444300; 1999-444301; 1999-518497; 1999-518712; 1999-527406; 1999-527407; 1999-579814; 1999-600987; 2000-013328; 2000-204831; 2000-237739; 2001-060948; 2001-060949; 2001-060950; 2001-060951; 2001-060952; 2001-060953; 2001-060954; 2001-060956; 2001-112019; 2001-137545; 2001-159609; 2001-201561; 2001-326969; 2001-328305; 2001-432031; 2002-082278; 2002-088763; 2002-179338; 2002-214905; 2002-682392; 2002-696720; 2003-103019; 2003-341784; 2003-765678; 2003-776578; 2004-200457; 2004-409950; 2004-625141; 2004-774396
XRPX Acc No: N98-133691

Medical probe for radio frequency ablation of tissue in prostate of human male - includes probe end having malleable tube and flexible tube that allow probe end to conform to curvature of cavity inside patient's body, and RF needle electrode

Patent Assignee: VIDAMED INC (VIDA-N)
Inventor: EDWARDS S D; LUNDQUIST I H
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5720719	A	19980224	US 92929638	A	19920812	199815 B
			US 92945666	A	19920916	
			US 9312370	A	19930202	
			US 9361647	A	19930513	
			US 9362364	A	19930513	
			US 9361072	A	19930514	
			US 93109190	A	19930819	
			US 94311820	A	19940926	

Priority Applications (No Type Date): US 94311820 A 19940926; US 92929638 A 19920812; US 92945666 A 19920916; US 9312370 A 19930202; US 9361647 A 19930513; US 9362364 A 19930513; US 9361072 A 19930514; US 93109190 A 19930819
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5720719	A		10	A61B-017/39	CIP of application US 92929638
					CIP of application US 92945666
					CIP of application US 9312370
					CIP of application US 9361647
					CIP of application US 9362364
					CIP of application US 9361072
					CIP of application US 93109190

CIP of patent US 5370675
CIP of patent US 5385544
CIP of patent US 5409453
CIP of patent US 5421819
CIP of patent US 5435805

Abstract (Basic): US 5720719 A

The probe (10) comprises an elongate tubular member (14),. having a steel tube (30), a flexible tube (32) and a malleable tube (34), sized to be able to enter the urethra and having a length so that when the distal extremity is disposed in the vicinity of the prostate the proximal extremity is outside of the urethra. The elongate tubular member has a passageway extending between its proximal and distal extremities, in which the **radio frequency needle** electrode (42,44) of an electrically conductive material, is slidably disposed. A sleeve of insulating material is coaxially disposed on the needle electrode.

A device carried by the distal extremity of the elongate tubular member and in communication with the passageway, directs the needle electrode and the insulating sleeve sidewise of the elongate tubular member and into the tissue of the prostate. A handle is secured to the proximal extremity of the elongate tubular member. At least a portion of the elongate tubular member is sufficiently bendable to permit the elongate tubular member to assume a curved shape which passes more easily through the curves of the urethra.

USE - Medical probe radio frequency ablation of tissue of male prostate surrounding portion of curved urethra.

ADVANTAGE - Penetrates tissue through intervening tissues to precise target tissue selected for medical action, such as tissue ablation and/or substance delivery, limiting this activity to precise selected site, minimising trauma. Flexible enough to accommodate any curves or obstructions within body cavity.

Dwg.1/11

Title Terms: MEDICAL; PROBE; RADIO; FREQUENCY; ABLATE; TISSUE; PROSTATE; HUMAN; MALE; PROBE; END; MALLEABLE; TUBE; FLEXIBLE; TUBE; ALLOW; PROBE; END; CONFORM; CURVE; CAVITY; PATIENT; BODY; RF; NEEDLE; ELECTRODE

Derwent Class: P31; S05

International Patent Class (Main): **A61B-017/39**

File Segment: EPI; EngPI

28/5/33 (Item 22 from file: 350)

DIALOG(R)File 350:Derwent WPIX

011573032 **Image available**

WPI Acc No: 1997-549513/199750

XRPX Acc No: N97-458206

Radio frequency power control method for performing ablation in human tissues - involves providing radio frequency power to ablation point and controlling power levels to produce thermal ablation over large area

Patent Assignee: VIDAMED INC (VIDA-N)

Inventor: BONNAURE L P; HENDRICK J N; KANNENBERG D P; STRUL B

Number of Countries: 023 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9740882	A2	19971106	WO 97US7311	A	19970430	199750	B
AU 9731168	A	19971119	AU 9731168	A	19970430	199812	
WO 9740882	A3	19971218	WO 97US7311	A	19970430	199817	
TW 351673	A	19990201	TW 97105805	A	19970718	199931	

Priority Applications (No Type Date): US 96641528 A 19960501
Cited Patents: No-SR.Pub; US 4950267; YUS 5370675
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9740882	A2	E	50	A61N-000/00	
Designated States (National): AU CA CN JP KR					
Designated States (Regional): AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE					
AU 9731168	A			A61N-005/00	Based on patent WO 9740882
WO 9740882	A3			A61N-000/00	
TW 351673	A			A61B-017/36	

Abstract (Basic): WO 9740882 A

The method for performing ablation, e.g. in male prostrates, involves using a **radio frequency** generator (17) with a transutheral **needle** ablation probe (12). This feeds two stylets (41,42) to the prostrate site aided by a scale (38) on the probe. The probe also contains an optical element and a number of temperature sensors that will be close to the ablation site. A return electrode (18) and an optional rectal thermometer (26) are provided.

When the probe has been positioned and one or both stylets inserted in the tissue, RF energy is applied to create the ablation effect. The level is controlled to produce ablation due to thermal effects rather than just electrical effects.

ADVANTAGE - Provides ablation areas that are controlled and can be of the maximum size possible.

Dwg.1/5

Title Terms: RADIO; FREQUENCY; POWER; CONTROL; METHOD; PERFORMANCE; ABLATE; HUMAN; TISSUE; RADIO; FREQUENCY; POWER; ABLATE; POINT; CONTROL; POWER; LEVEL; PRODUCE; THERMAL; ABLATE; AREA
Derwent Class: P31; P34; S05
International Patent Class (Main): **A61B-017/36** ; A61N-000/00; A61N-005/00
File Segment: EPI; EngPI

28/5/34 (Item 23 from file: 350)
DIALOG(R)File 350:Derwent WPIX

011479371 **Image available**
WPI Acc No: 1997-457278/199742
Related WPI Acc No: 1999-276560; 1999-571962; 2000-223353
XRPX Acc No: N97-380870

Linear lesion creation apparatus for body tissue - which delivers radio frequency **energy to electrodes while saline conductive fluid is delivered to** infusion **tube**

Patent Assignee: CARDIAC PATHWAYS CORP (CARD-N)
Inventor: CHAPMAN T J; IMRAN M; POMERANZ M L; SHERMAN D R; FOSSE L; RIEB D
Number of Countries: 019 Number of Patents: 008
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9732525	A1	19970912	WO 96US17536	A	19961104	199742	B
US 5800482	A	19980901	US 96611656	A	19960306	199842	
EP 884978	A1	19981223	EP 96937859	A	19961104	199904	
			WO 96US17536	A	19961104		
US 6015407	A	20000118	US 96611656	A	19960306	200011	
			US 9849332	A	19980327		
JP 2000506751	W	20000606	WO 96US17536	A	19961104	200035	
			JP 97531745	A	19961104		
US 6119041	A	20000912	US 96611656	A	19960306	200046	
			US 98128877	A	19980804		

EP 884978	B1	20001004	EP 96937859	A	19961104	200050
			WO 96US17536	A	19961104	
DE 69610566	E	20001109	DE 610566	A	19961104	200064
			EP 96937859	A	19961104	
			WO 96US17536	A	19961104	

Priority Applications (No Type Date): US 96611656 A 19960306; US 9849332 A 19980327; US 98128877 A 19980804
Cited Patents: DE 3038885; EP 499491; EP 539125; FR 1466248; US 4850351; US 5368597; US 5454370; US 5487385; WO 9007909; WO 9408519; WO 9534346
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9732525	A1	E	64	A61B-017/00	
Designated States (National): JP					
Designated States (Regional): AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE					
US 5800482	A			A61B-017/39	
EP 884978	A1	E			Based on patent WO 9732525
Designated States (Regional): DE FR GB IT					
US 6015407	A			A61B-017/39	Cont of application US 96611656 Cont of patent US 5800482
JP 2000506751	W		62	A61B-018/12	Based on patent WO 9732525
US 6119041	A			A61B-017/39	Cont of application US 96611656 Cont of patent US 5800482
EP 884978	B1	E		A61B-017/00	Based on patent WO 9732525
Designated States (Regional): DE FR GB IT					
DE 69610566	E			A61B-017/00	Based on patent EP 884978 Based on patent WO 9732525

Abstract (Basic): WO 9732525 A

The lesion creation apparatus includes an elongate support member which can be inserted into human vessels and manipulated through them. The support member has an elongate ablation section. An electrode is carried on the ablation section.

A fluid permeable deformable member partially covers the electrodes. Current is delivered to the electrodes. Conductive fluid is delivered through the deformable member to the ablation section. The fluid then creates a conductive path between the electrodes and the tissue when the electrodes are positioned next to the tissue.

USE/ADVANTAGE - For heart. For treating fibrillation. Improved conductive pathway. Improved effectiveness due to improved continuity of lesions. Efficient.

Dwg.1/17

Title Terms: LINEAR; LESION; CREATION; APPARATUS; BODY; TISSUE; DELIVER; RADIO; FREQUENCY; ENERGY; ELECTRODE; SALINE; CONDUCTING; FLUID; DELIVER; INFUSION; TUBE
Derwent Class: P31; S05
International Patent Class (Main): **A61B-017/00** ; **A61B-017/39** ; **A61B-018/12**
International Patent Class (Additional): **A61B-001/05** ; **A61B-018/04** ; **A61B-018/14**
File Segment: EPI; EngPI

28/5/37 (Item 26 from file: 350)
DIALOG(R)File 350:Derwent WPIX

011200158 **Image available**
WPI Acc No: 1997-178083/199716
Related WPI Acc No: 1997-144526; 1997-191769; 1997-204739

XRPX Acc No: N97-146836

Magnetic resonance imaging system for obtaining vessel-selective MR images from subject - in which fluid is passed through small high-field polarising magnet having toroidal geometry before being injected into catheter inserted in vessel of patient

Patent Assignee: GENERAL ELECTRIC CO (GENE)
Inventor: DARROW R D; DUMOULIN C L
Number of Countries: 002 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5609153	A	19970311	US 95534998	A	19950927	199716	B
JP 9173317	A	19970708	JP 96253644	A	19960926	199737	

Priority Applications (No Type Date): US 95534998 A 19950927; US 95537571 A 19951002; US 95537572 A 19951002; US 95537573 A 19951002; US 95537574 A 19951002; US 95537575 A 19951002
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5609153	A		7		
JP 9173317	A		13		

Abstract (Basic): US 5609153 A

The magnetic resonance (MR) active invasive device system employs a small, high-field polarizing magnet having a toroidal geometry, and a large low-field magnetic resonance (MR) imaging magnet for the generating MR angiograms of selected blood vessels. A subject is positioned in a large low-field MR imaging magnet, and a catheter is inserted into the patient at or near the root of a vessel tree to be imaged. A fluid, intended to be used as a contrast agent is first passed through the small high-field polarizing magnet, causing a great deal of net longitudinal magnetization to be produced in the fluid.

The fluid is then **introduced** into the subject through the catheter. **Radio frequency** (**RF**) pulses and magnetic field gradients are then applied to the patient as in conventional MR imaging. Since the fluid has a larger longitudinal magnetization, before the MR imaging sequence, the fluid produces a much larger MR response signal than other tissue, resulting in the vessel tree being imaged with excellent contrast.

USE/ADVANTAGE - Requires reduced power to operate than high-field imaging systems, and uses simpler static imaging magnet which may be resistive or permanent and not superconducting. Uses polarising magnet with minimal fringe fields.

Dwg.1/3

Title Terms: MAGNETIC; RESONANCE; IMAGE; SYSTEM; OBTAIN; VESSEL; SELECT; IMAGE; SUBJECT; FLUID; PASS; THROUGH; HIGH; FIELD; POLARISE; MAGNET; TOROIDAL; GEOMETRY; INJECTION; CATHETER; INSERT; VESSEL; PATIENT
Derwent Class: P31; P34; S01; S03; S05; T01
International Patent Class (Main): **A61B-005/055**
International Patent Class (Additional): G01R-033/30; G01R-033/31
File Segment: EPI; EngPI

28/5/39 (Item 28 from file: 350)

DIALOG(R)File 350:Derwent WPIX

010865472 **Image available**
WPI Acc No: 1996-362423/199636
Related WPI Acc No: 1992-332087; 1994-037124; 1994-058400; 1994-233389; 1994-279414; 1995-006278; 1995-006284; 1995-006285; 1995-098529; 1995-200153; 1995-240431; 1995-254879; 1995-263687; 1995-344425;

1995-350622; 1995-357865; 1996-019735; 1996-057376; 1996-068670; 1996-068671; 1996-096969; 1996-117359; 1996-238605; 1996-424512; 1997-164984; 1997-164985; 1997-288472; 1997-393311; 1997-434801; 1997-434802; 1997-434803; 1997-434804; 1997-488752; 1997-558038; 1997-558641; 1997-558642; 1997-558643; 1997-558644; 1997-558645; 1998-018166; 1998-018167; 1998-018168; 1998-018169; 1998-018252; 1998-120291; 1998-158711; 1998-168283; 1998-216998; 1998-506432; 1998-506433; 1998-506445; 1998-520783; 1998-567504; 1999-044369; 1999-131796; 1999-131798; 1999-444300; 1999-444301; 1999-518497; 1999-518712; 1999-527406; 1999-527407; 1999-579814; 1999-600987; 2000-013328; 2000-204831; 2000-237739; 2001-060948; 2001-060949; 2001-060950; 2001-060951; 2001-060952; 2001-060953; 2001-060954; 2001-060956; 2001-112019; 2001-137545; 2001-159609; 2001-201561; 2001-326969; 2001-328305; 2001-432031; 2002-082278; 2002-088763; 2002-179338; 2002-214905; 2002-682392; 2002-696720; 2003-103019; 2003-341784; 2003-765678; 2003-776578; 2004-200457; 2004-409950; 2004-625141; 2004-774396

XRPX Acc No: N96-305554

Trans-urethral needle ablation device e.g. for prostate treatment - has disposable needle assembly removably mounted in passage in bridge and has needle electrode and coaxial insulating sleeve

Patent Assignee: VIDAMED INC (VIDA-N)

Inventor: BAKER J A; EDWARDS S D; JONES C S; LEE K S; LUNDQUIST I H; SOMMER P R

Number of Countries: 070 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9622742	A1	19960801	WO 96US912	A	19960124	199636	B
AU 9647650	A	19960814	AU 9647650	A	19960124	199650	
			WO 96US912	A	19960124		
US 5667488	A	19970916	US 92929638	A	19920812	199743	
			US 9312370	A	19930202		
			US 9361647	A	19930513		
			US 9362364	A	19930513		
			US 93109190	A	19930819		
			US 94191258	A	19940202		
			US 95377645	A	19950125		
US 5807309	A	19980915	US 92929638	A	19920812	199844	
			US 9312370	A	19930202		
			US 9361647	A	19930513		
			US 9362364	A	19930513		
			US 93109190	A	19930819		
			US 94191258	A	19940202		
			US 95377645	A	19950125		
			US 97790094	A	19970129		

Priority Applications (No Type Date): US 95377645 A 19950125; US 92929638 A 19920812; US 9312370 A 19930202; US 9361647 A 19930513; US 9362364 A 19930513; US 93109190 A 19930819; US 94191258 A 19940202; US 97790094 A 19970129

Cited Patents: JP 2121675; US 3470876; US 4753223; WO 9210142

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9622742	A1	E	54	A61B-017/39	

Designated States (National): AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN

Designated States (Regional): AT BE CH DE DK EA ES FR GB GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG

AU 9647650	A		Based on patent WO 9622742
US 5667488	A	17	CIP of application US 92929638

			CIP of application US 9312370
			CIP of application US 9361647
			CIP of application US 9362364
			CIP of application US 93109190
			CIP of application US 94191258
			CIP of patent US 5370675
			CIP of patent US 5409453
			CIP of patent US 5421819
			CIP of patent US 5435805
US 5807309	A	A61B-017/20	CIP of application US 92929638
			CIP of application US 9312370
			CIP of application US 9361647
			CIP of application US 9362364
			CIP of application US 93109190
			CIP of application US 94191258
			Cont of application US 95377645
			CIP of patent US 5370675
			CIP of patent US 5409453
			CIP of patent US 5421819
			CIP of patent US 5435805
			CIP of patent US 5549644
			Cont of patent US 5667488

Abstract (Basic): WO 9622742 A

The device has a bridge (22) with a passage (236). A sheath (23) has proximal and distal ends (42,43) and a passage (236) connected to the bridge. When the distal extremity is in the vicinity of the prostate the proximal end is outside the urethra. A disposable needle assembly (26) is removably mounted in the passage in the bridge and has a needle electrode (10) and a coaxial insulating sleeve (91). The proximal end of the needle assembly moves sideways at an angle wrt the longitudinal axis to face the urethral wall.

An actuator (15) causes advancement of the needle electrode (10) and the insulation sleeve through the urethral wall into the target volume in the tissue of the prostate.

ADVANTAGE - Tenting of urethral wall is minimised. Can be disposed after one-time use. Allows treatment without anaesthetic.

Dwg.1/21

Title Terms: TRANS; URETHRA; NEEDLE; ABLATE; DEVICE; PROSTATE; TREAT; DISPOSABLE; NEEDLE; ASSEMBLE; REMOVE; MOUNT; PASSAGE; BRIDGE; NEEDLE; ELECTRODE; COAXIAL; INSULATE; SLEEVE

Derwent Class: P31; S05

International Patent Class (Main): **A61B-017/20** ; **A61B-017/39**

File Segment: EPI; EngPI

28/5/40 (Item 29 from file: 350)

DIALOG(R)File 350:Derwent WPIX

010803388 **Image available**

WPI Acc No: 1996-300341/199630

XRPX Acc No: N96-252754

Electrosurgical instrument for tissue ablation - has outer tube with tip forming electrode and inner tube to deliver cooling fluid to tip which is carried away through outer tube

Patent Assignee: LORENTZEN T (LORE-I)

Inventor: LORENTZEN T

Number of Countries: 066 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9618349	A2	19960620	WO 95DK471	A	19951124	199630	B
AU 9642525	A	19960703	AU 9642525	A	19951124	199642	
WO 9618349	A3	19960829	WO 95DK471	A	19951124	199643	
EP 797408	A1	19971001	EP 95940965	A	19951124	199744	
			WO 95DK471	A	19951124		
US 5951546	A	19990914	WO 95DK471	A	19951124	199944	
			US 97849675	A	19970930		

Priority Applications (No Type Date): DK 941424 A 19941213
Cited Patents: 02 40755900; 00 10567700; 00 24635000; 00 27411800; 00 32209200; 00 60860900; -SR.Pub
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9618349	A2	E	24	A61B-017/39	
Designated States (National): AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IS JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TT UA UG US UZ VN					
Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG					
AU 9642525	A			A61B-017/39	Based on patent WO 9618349
EP 797408	A1	E		A61B-017/39	Based on patent WO 9618349
Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LI LT LU LV MC NL PT SE SI					
US 5951546	A			A61B-017/39	Based on patent WO 9618349
WO 9618349	A3			A61B-017/39	

Abstract (Basic): WO 9618349 A

The electrosurgical instrument includes a stainless steel needle electrode (10) comprising an outer tube (14 with a tip (16) and point (16') constructed to penetrate tissue with a minimum risk of haemorrhage. The non-exposed part of the tube is surrounded by an insulating material (12), the distal 2mm of the tube is not insulated to allow RF delivery.

An inner tube (18) is connected to a line (22) which supplies a cooling fluid to the tip with the fluid taken away through the outer tube to a line (24) for discharge. A pump circulates the fluid. The outer tube is connected to a RF surgical generator through a line (26) to provide **RF** power to the **needle** electrode.

USE/ADVANTAGE - Performing lesions to tissue, such that tumours, birth marks etc can be removed. Prevents charring in providing lesion of any specific size.

Dwg.1/9

Title Terms: ELECTROSURGICAL; INSTRUMENT; TISSUE; ABLATE; OUTER; TUBE; TIP; FORMING; ELECTRODE; INNER; TUBE; DELIVER; COOLING; FLUID; TIP; CARRY; THROUGH; OUTER; TUBE
Derwent Class: P31; S05
International Patent Class (Main): **A61B-017/39**
File Segment: EPI; EngPI

28/5/42 (Item 31 from file: 350)
DIALOG(R)File 350:Derwent WPIX

010600016 **Image available**
WPI Acc No: 1996-096969/199610
Related WPI Acc No: 1994-037124; 1994-058400; 1994-279414; 1995-006278; 1995-006284; 1995-006285; 1995-098529; 1995-200153; 1995-240431; 1995-254879; 1995-263687; 1995-344425; 1995-357865; 1996-019735; 1996-068670; 1996-068671; 1996-238605; 1996-362423; 1996-424512;

1997-164984; 1997-164985; 1997-288472; 1997-393311; 1997-434801; 1997-434802; 1997-434803; 1997-434804; 1997-488752; 1997-558641; 1997-558642; 1997-558643; 1997-558644; 1997-558645; 1998-018166; 1998-018167; 1998-018168; 1998-018169; 1998-018252; 1998-120291; 1998-158711; 1998-168283; 1998-216998; 1998-506432; 1998-506433; 1998-506445; 1998-520783; 1998-567504; 1999-044369; 1999-131796; 1999-131798; 1999-444300; 1999-444301; 1999-518497; 1999-518712; 1999-527406; 1999-527407; 1999-579814; 1999-600987; 2000-013328; 2000-204831; 2000-237739; 2001-060948; 2001-060949; 2001-060950; 2001-060951; 2001-060952; 2001-060953; 2001-060954; 2001-060956; 2001-112019; 2001-137545; 2001-159609; 2001-201561; 2001-326969; 2001-328305; 2001-432031; 2002-082278; 2002-088763; 2002-179338; 2002-214905; 2002-682392; 2002-696720; 2003-103019; 2003-341784; 2003-765678; 2003-776578; 2004-200457; 2004-409950; 2004-625141; 2004-774396

XRPX Acc No: N96-081016

RF ablation device for inserting RF ablation electrode though tissue to tissue site to be ablated - has tube with optical viewing device associated with it for examining tissue adjacent to distal end and it can be hollow needle, laparoscope etc while electrode can be e.g. hollow tube

Patent Assignee: ZOMED INT (ZOME-N)

Inventor: EDWARDS S D; LAX R G; SHARKEY H R

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5486161	A	19960123	US 92929638	A	19920812	199610	B
			US 9312370	A	19930202		
			US 9361647	A	19930513		
			US 9362364	A	19930513		
			US 9361072	A	19930514		
			US 93148441	A	19931108		

Priority Applications (No Type Date): US 93148441 A 19931108; US 92929638 A 19920812; US 9312370 A 19930202; US 9361647 A 19930513; US 9362364 A 19930513; US 9361072 A 19930514

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5486161	A		13	A61B-017/39	CIP of application US 92929638
					CIP of application US 9312370
					CIP of application US 9361647
					CIP of application US 9362364
					CIP of application US 9361072
					CIP of patent US 5370675
					CIP of patent US 5385544
					CIP of patent US 5421819
					CIP of patent US 5435805

Abstract (Basic): US 5486161 A

The device includes a rigid hollow needle having a needle lumen and an open, sharpened distal end adapted to penetrate a tissue. A **hollow RF** electrode is positioned within the **needle** lumen and extendable beyond the distal end of the **needle** lumen. The **RF** electrode has an electrode lumen and an open, distal end. The electrode lumen serves as a fluid conduit for delivering fluid through the open, distal end of the electrode.

A fibre optic is positioned within the electrode lumen for providing visualization during ablation. The fibre optic has a distal end proximal distanced from the electrode distal end. A fluid delivery source is used for delivering fluid through the electrode lumen to simultaneously cleanse the fibre optic and irrigate the tissue ablation site.

USE/ADVANTAGE - For e.g. reducing tissue mass and fluid substance or energy delivery etc. Allows accessing difficult to access tissues and can be deployed via non-linear path.

Dwg.1/10

Title Terms: RF; ABLATE; DEVICE; INSERT; RF; ABLATE; ELECTRODE; TISSUE; TISSUE; SITE; TUBE; OPTICAL; VIEW; DEVICE; ASSOCIATE; TISSUE; ADJACENT; DISTAL; END; CAN; HOLLOW; NEEDLE; LAPAROSCOPY; ELECTRODE; CAN; HOLLOW; TUBE

Index Terms/Additional Words: CANCER; NON-CANCEROUS; TUMOUR; PROSTATE; TISSUE

Derwent Class: P31; S05

International Patent Class (Main): **A61B-017/39**

File Segment: EPI; EngPI

28/5/43 (Item 32 from file: 350)

DIALOG(R)File 350:Derwent WPIX

010457091

WPI Acc No: 1995-358410/199546

Related WPI Acc No: 1997-280299; 2000-181780; 2000-587749; 2002-425533; 2003-310423; 2003-831663

XRAM Acc No: C95-156745

XRPX Acc No: N95-266354

New compsns. contg. homeopathic dilutions of a growth factor - for treating disorders, including chronic viral infection, cancer and diabetes

Patent Assignee: BIOMEDICAL EXPLORATIONS LLC (BIOM-N); BIOMED COMM INC (BIOM-N); BREWITT B (BREW-I)

Inventor: BREWITT B A; BREWITT B

Number of Countries: 062 Number of Patents: 006

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9526679	A1	19951012	WO 95US3984	A	19950330	199546	B
AU 9522753	A	19951023	AU 9522753	A	19950330	199605	
US 5626617	A	19970506	US 94221365	A	19940331	199724	
			US 95575840	A	19951220		
EP 776175	A1	19970604	EP 95916149	A	19950330	199727	
			WO 95US3984	A	19950330		
MX 9605234	A1	19990401	MX 965234	A	19961030	200055	
CN 1149822	A	19970514	CN 95193391	A	19950330	200123	

Priority Applications (No Type Date): US 94221365 A 19940331; US 95575840 A 19951220

Cited Patents: GB 2128093; GB 2151489; SU 1538916; SU 7976869; US 4341762; US 4863902; US 5231988

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9526679	A1	E	66	A61B-005/05	
Designated States (National): AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW MX NL NO NZ PL PT RO RU SD SE SI SK TJ TT UA UZ VN					
Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT KE LU MC MW NL OA PT SD SE SZ UG					
AU 9522753	A			A61B-005/05	Based on patent WO 9526679
US 5626617	A		18	A61M-039/00	Cont of application US 94221365
EP 776175	A1	E		A61B-005/05	Based on patent WO 9526679
Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE					
MX 9605234	A1			A61B-005/05	

CN 1149822 A A61B-005/05

Abstract (Basic): WO 9526679 A

(A) A compsn. comprising a homeopathic dilution of one or more growth factors is claimed.

Also claimed are: (B) the admin. of a homeopathic dilution of one or more growth factors in a method for (a) treating disorders, including chronic viral infections, cancer and diabetes; (b) modifying blood lymphocyte counts in a patient; (c) modifying cholesterol levels in a patient; (d) modifying calcium levels in a patient; or (e) modifying triglyceride levels in a patient; (C) a method for treating disorders including chronic viral infections, cancer and diabetes comprising **administering** a **radio frequency** signal corresp. to a homeopathic dilution of one or more growth factors.

USE - The compsns. can be used for treating viral infections such as HIV, Epstein-Barr virus, herpes simplex, papilloma, cytomegalovirus, hepatitis B, Coxsachie B, hauta virus or human herpes 6 virus infection and also cancer or diabetes (claimed).

ADVANTAGE - The compsns. can slow the progression of disease and/or relieve disease symptoms without any unwanted side effects.

Dwg.0/14

Title Terms: NEW; COMPOSITION; CONTAIN; HOMEOPATHIC; DILUTE; GROWTH; FACTOR ; TREAT; DISORDER; CHRONIC; VIRUS; INFECT; CANCER; DIABETES

Derwent Class: B04; P31; P34

International Patent Class (Main): **A61B-005/05** ; A61M-039/00

International Patent Class (Additional): A61K-037/00; A61K-038/00; A61K-038/17

File Segment: CPI; EngPI

28/5/44 (Item 33 from file: 350)

DIALOG(R)File 350:Derwent WPIX

010368787 **Image available**

WPI Acc No: 1995-270148/199536

Related WPI Acc No: 1992-332087; 1994-037124; 1994-058400; 1994-233389; 1994-279414; 1995-006278; 1995-006284; 1995-006285; 1995-098529; 1995-200153; 1995-240431; 1995-254879; 1995-263687; 1995-344425; 1995-350622; 1995-357865; 1996-019735; 1996-057376; 1996-096969; 1996-117359; 1996-238605; 1996-362423; 1996-424512; 1997-164984; 1997-164985; 1997-288472; 1997-434801; 1997-434802; 1997-434803; 1997-434804; 1997-488752; 1997-558038; 1997-558641; 1997-558642; 1997-558643; 1997-558644; 1997-558645; 1998-018166; 1998-018167; 1998-018168; 1998-018169; 1998-018252; 1998-120291; 1998-158711; 1998-168283

XRPX Acc No: N95-207822

Trans-urethral needle ablation surgical instrument - has lumen passed through sheath for treating prostate gland by application of HF energy via needle electrode in auxiliary guiding tube unit

Patent Assignee: VIDAMED INC (VIDA-N)

Inventor: BAKER J A; EDWARDS S D; LAX R G; LUNDQUIST I H; SHARKEY H R; SOMMER P R

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
DE 4423216	A1	19950803	DE 4423216	A	19940701	199536	B

Priority Applications (No Type Date): US 94191258 A 19940202

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes

DE 4423216 A1 28 A61B-017/39

Abstract (Basic): DE 4423216 A

A guiding tube unit is slidable in the lumen of the sheath. A needle electrode is slidable in the lumen in the guiding tube unit. An insulating casing surrounds the needle electrode so that the distal end of the latter lies free. A handle for manual operation is provided at the proximal end of the sheath.

A lever is held by the handle so that the distal end of the guiding tube unit can be bent at an angle w.r.t. the length axis. This action allows the lumen to be directed in the guiding tube unit towards the wall of the urinary tract. The handle carries a control coupled to the

needle electrode and insulating casing to allow the electrode tube moved forwards and retracted w.r.t. the guiding tube unit. The electrode can reach the tissue of the prostrate gland via the wall of the urinary tract to build a lesion in the gland.

ADVANTAGE - Protects urinary tract during oblation. Needle electrode cannot penetrate insulating casing. Control prevents undesired destruction of tissue.

Dwg.2/38

Title Terms: TRANS; URETHRA; NEEDLE; ABLATE; SURGICAL; INSTRUMENT; LUMEN; PASS; THROUGH; SHEATH; TREAT; PROSTATE; GLAND; APPLY; HF; ENERGY; NEEDLE; ELECTRODE; AUXILIARY; GUIDE; TUBE; UNIT

Index Terms/Additional Words: Cystoscope

Derwent Class: P31; S05

International Patent Class (Main): **A61B-017/39**

International Patent Class (Additional): **A61B-017/00**

File Segment: EPI; EngPI

28/5/45 (Item 34 from file: 350)

DIALOG(R)File 350:Derwent WPIX

010292660 **Image available**

WPI Acc No: 1995-193919/199525

Related WPI Acc No: 1996-029649; 1996-139409; 1996-208540; 1997-118194; 1997-118195; 1997-258568; 1997-502809; 1998-239054; 1998-494593; 1999-468091; 2000-364060; 2000-440876; 2002-414467; 2003-089765; 2003-625017; 2003-786388; 2003-895630; 2003-895848; 2004-058443; 2004-675669; 2005-171774

XRPX Acc No: N95-152239

Body tissue treatment method for cancer or non-malignant tumours - applying RF **energy to electrode surface exposed from stylet** introduced **into vicinity of bodily tissues, sufficient to heat tissue for predetermined period**

Patent Assignee: ZOMED INT INC (ZOME-N); ZOMED INT (ZOME-N)

Inventor: EDWARDS S D; LAX R G; SHARKEY H R

Number of Countries: 019 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9513113	A1	19950518	WO 94US12842	A	19941108	199525	B
AU 9510514	A	19950529	AU 9510514	A	19941108	199537	
US 5458597	A	19951017	US 93148439	A	19931108	199547	

Priority Applications (No Type Date): US 93148439 A 19931108

Cited Patents: EP 462302; EP 519415; EP 566450

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9513113	A1	E	32	A61N-005/02	

Designated States (National): AU JP US

Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
AU 9510514 A A61N-005/02 Based on patent WO 9513113
US 5458597 A 16 A61B-017/39

Abstract (Basic): WO 9513113 A

The method for treating body tissues containing cancerous cells or non-malignant tumours involves introducing a stylet comprising an electrode surface and a sleeve longitudinally moveable over the electrode surface into the vicinity of the body tissues, and exposing a part of the electrode surface. RF power is supplied to the electrode surface sufficient to heat the tissue to a temp of above 45 degrees Centigrade for a time to cause reduction of tissue mass in the vicinity of the electrode.

The treatment device includes a handle (2) and a delivery tube portion (4). A stylet sleeve control manual tab (6) and stylet electrode control manual tab (8) are mounted for sliding engagement in slots (10,12) in the handle top plate. The electrode is pref formed of a flexible, shape memory metal e.g nickel-titanium alloy or tempered steel. The sleeve is formed of a highly conformable insulating plastic material e.g polyimide.

USE/ADVANTAGE - Treating body tissues containing, e.g cancerous cells or non-malignant tumours with RF ablation, alone or in combination with systemic or localised chemotherapy. Increases distribution of therapeutic agents using ablative heat, alternating with or concurrent with tissue ablation.

Dwg.3/12

Title Terms: BODY; TISSUE; TREAT; METHOD; CANCER; NON; MALIGNANT; TUMOUR; APPLY; RF; ENERGY; ELECTRODE; SURFACE; EXPOSE; STYLET; INTRODUCING; VICINITY; BODY; TISSUE; SUFFICIENT; HEAT; TISSUE; PREDETERMINED; PERIOD
Derwent Class: P31; P34; S05
International Patent Class (Main): **A61B-017/39** ; A61N-005/02
File Segment: EPI; EngPI

28/5/47 (Item 36 from file: 350)
DIALOG(R)File 350:Derwent WPIX

010242644 **Image available**
WPI Acc No: 1995-143899/199519
XRAM Acc No: C95-066134
XRPX Acc No: N95-113432

Intra-body electrode for diagnosis and treatment - includes water-contg. adhesive layer and snap of chromium-nickel stainless steel.

Patent Assignee: NITTO DENKO CORP (NITL)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 7067842	A	19950314	JP 93217419	A	19930901	199519	B

Priority Applications (No Type Date): JP 93217419 A 19930901
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 7067842	A		4	A61B-005/0408	

Abstract (Basic): JP 7067842 A

Intrabody electrode comprises a support element (1), water-contg. adhesive layer (2) adhering to one side surface of the support element, and a snap (3) through the support (1) as connecting terminal with an outer connector. The snap (3) is made of Cr-Ni stainless steel contg.

Ni at least 8 wt.%.

USE - Used for transmitting electric signals from the body to medical diagnostic appts. or **introducing radio frequency** signal for treatment.

ADVANTAGE - Prevents corrosion of snap switch.

Dwg.3/3

Title Terms: INTRA; BODY; ELECTRODE; DIAGNOSE; TREAT; WATER; CONTAIN; ADHESIVE; LAYER; SNAP; CHROMIUM; NICKEL; STAINLESS; STEEL
Derwent Class: A96; P31; P34; S05
International Patent Class (Main): **A61B-005/0408**
International Patent Class (Additional): A61N-001/04
File Segment: CPI; EPI; EngPI

28/5/51 (Item 40 from file: 350)
DIALOG(R)File 350:Derwent WPIX

008427500 **Image available**
WPI Acc No: 1990-314501/199042
XRPX Acc No: N90-241238

Thermal tissue destroyer for gall bladder - uses probe with RF emitter in balloon expanded by injection of liquid removes bile

Patent Assignee: GEDDES L A (GEDD-I); MED INSTITUTE INC (MEDI-N); PURDUE RES FOUND (PURD); BOURLAND J D (BOUR-I); HINDS M H (HIND-I); VOORHEES W D (VOOR-I)
Inventor: BOURLAND J D; GEDDES L A; HINDS M H; VOORHEES W D
Number of Countries: 016 Number of Patents: 005
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 392837	A	19901017	EP 90303939	A	19900411	199042	B
US 4979948	A	19901225	US 89337356	A	19890413	199103	
CA 2013732	A	19911003				199151	N
EP 392837	B1	19960131	EP 90303939	A	19900411	199609	
DE 69025083	E	19960314	DE 625083	A	19900411	199616	
			EP 90303939	A	19900411		

Priority Applications (No Type Date): US 89337356 A 19890413
Cited Patents: A3...9147; EP 182689; EP 222137; FR 2501034; NoSR.Pub; US 4696668; US 4676258
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 392837	A				
Designated States (Regional): AT BE CH DE ES FR GB GR IT LI LU NL SE					
EP 392837	B1	E	7	A61B-017/39	
Designated States (Regional): AT BE CH DE DK ES FR GB GR IT LI LU NL SE					
DE 69025083	E			A61B-017/39	Based on patent EP 392837

Abstract (Basic): EP 392837 A

The apparatus is used for thermally destroying or coagulating living tissue forming an inner wall in the body of a patient. The appts. has an elongated member (100) with an RF emitter at its remote end (105) and an extendable arrangement (106) which when extended conforms to the contours of the inner wall to position the RF emitter within the inner wall.

A liquid (107) is maintained between the emitter and the inner wall whilst the wall is thermally destroyed. The liquid is contained in a balloon which is expanded by supplying liquid to it and means is provided for removing some of the bile prior to operation of the emitter.

ADVANTAGE - Thermally destroys or coagulates layer of living

tissue. (6pp Dwg.No.1,2/5)
Title Terms: THERMAL; TISSUE; DESTROY; GALL; BLADDER; PROBE; RF; EMITTER; BALLOON; EXPAND; INJECTION; LIQUID; REMOVE; BILE
Derwent Class: P31; P34; S05
International Patent Class (Main): **A61B-017/39**
International Patent Class (Additional): A61N-005/00
File Segment: EPI; EngPI

28/5/52 (Item 41 from file: 350)
DIALOG(R)File 350:Derwent WPIX

008351859 **Image available**
WPI Acc No: 1990-238860/199031
XRPX Acc No: N90-185253

Removal device for atherosclerotic plaque in artery - uses electrical sparking produced by application of RF pulses to selected electrodes of electrode array in catheter

Patent Assignee: ANGIOPLASTY SYSTEMS INC (ANGI-N); ADVANCED CORONARY INTERVENTION INC (ADCO-N); ANGIOPLASTY SYST IN (ANGI-N)
Inventor: JANSSEN M
Number of Countries: 016 Number of Patents: 004
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9007303	A	19900712				199031	B
AU 9049454	A	19900801				199042	
US 5454809	A	19951003	US 89294270	A	19890106	199545	
			US 91637992	A	19910103		
			US 92849638	A	19920305		
			US 92974670	A	19921122		
			US 9396651	A	19930722		
			US 94230439	A	19940419		
US 5626576	A	19970506	US 89294270	A	19890106	199724	
			US 91637992	A	19910103		
			US 92849638	A	19920305		
			US 92974670	A	19921122		
			US 9396651	A	19930722		
			US 94230439	A	19940419		
			US 95531453	A	19950921		

Priority Applications (No Type Date): US 89294270 A 19890106; US 91637992 A 19910103; US 92849638 A 19920305; US 92974670 A 19921122; US 9396651 A 19930722; US 94230439 A 19940419; US 95531453 A 19950921
Cited Patents: 1.Jnl.Ref; DE 3516830; US 4532924; US 4576177; US 4643186; US 4682596
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9007303	A	E	24		
Designated States (National): AU CA JP					
Designated States (Regional): AT BE CH DE DK ES FR GB IT LU NL SE					
US 5454809	A		8	A61B-017/39	Cont of application US 89294270
					Cont of application US 91637992
					Cont of application US 92849638
					Cont of application US 92974670
					Cont of application US 9396651
US 5626576	A		8	A61B-017/39	Cont of application US 89294270
					Cont of application US 91637992
					Cont of application US 92849638
					Cont of application US 92974670
					Cont of application US 9396651

Div ex application US 94230439
Div ex patent US 5454809

Abstract (Basic): WO 9007303 A

Atherosclerotic plaque in an artery is ablated by the use of pulses of radio frequency sparking. Sparking electrodes (14,15) are disposed in a symmetrical array at the end of an electrically insulative catheter (12). The electrodes are connected to mutually insulated leads extending along the catheter.

RF pulses are applied to selected electrodes to produce sparking inbetween. Alternatively, a patient plate for return current may be employed. The plaque is disintegrated with minimum residue formation by suitable choice of RF waveform.

ADVANTAGE - Permits efficient ablation of asymmetrically disposed plaque.

Dwg.1/11

Title Terms: REMOVE; DEVICE; ATHEROSCLEROSIS; PLAQUE; ARTERY; ELECTRIC; SPARK; PRODUCE; APPLY; RF; PULSE; SELECT; ELECTRODE; ELECTRODE; ARRAY; CATHETER

Derwent Class: P31; S05

International Patent Class (Main): **A61B-017/39**

File Segment: EPI; EngPI

28/5/53 (Item 42 from file: 350)

DIALOG(R)File 350:Derwent WPIX

008277666 **Image available**

WPI Acc No: 1990-164667/199022

XRPX Acc No: N90-127840

Probe head for NMR tomography - has hollow cylindrical insert enabling tuning to resonant frequencies corresp. to different nucleus types

Patent Assignee: BRUKER MEDIZINTECH GMBH (BRUK-N)

Inventor: SCHNUR G; GUNTER S

Number of Countries: 003 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
DE 3839046	A	19900523	DE 3839046	A	19881118	199022	B
GB 2227321	A	19900725	GB 8925919	A	19891116	199030	
US 4992737	A	19910212	US 89436487	A	19891114	199109	
DE 3839046	C2	19930401	DE 3839046	A	19881118	199313	
GB 2227321	B	19930421	GB 8925919	A	19891116	199316	

Priority Applications (No Type Date): DE 3839046 A 19881118

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DE 3839046	C2		6	G01R-033/30	
GB 2227321	B			G01R-033/34	

Abstract (Basic): DE 3839046 A

The specimen head (1) contains a cage resonator consisting of conductor sections (22) on a cylinder and capacitors in series with the conductor sections defining the electrical length of the resonator. The head contains a device for stimulating a TEM dipole wave in the resonator.

The head contains a hollow cylinder insert (51) which is fed into the hollow chamber formed by the conductors and which passes the e.m. HF field. When the insert is in a defined position in the chamber the electrical length of the resonator is increased to a value corresp. to a second resonant frequency. (6pp Dwg.No.1/1)

Title Terms: PROBE; HEAD; NMR; TOMOGRAPHY; HOLLOW; CYLINDER; INSERT; ENABLE ; TUNE; RESONANCE; FREQUENCY; CORRESPOND; NUCLEUS; TYPE
Index Terms/Additional Words: NUCLEAR; MAGNETIC; RESONANCE
Derwent Class: P31; S01; S03; S05; V02
International Patent Class (Main): G01R-033/30; G01R-033/34
International Patent Class (Additional): **A61B-005/05** ; **A61B-005/055** ; G01N-033/32
File Segment: EPI; EngPI

28/5/57 (Item 46 from file: 350)
DIALOG(R)File 350:Derwent WPIX

004509894
WPI Acc No: 1986-013238/198602
XRAM Acc No: C86-005598
XRPX Acc No: N86-009900
Administering cytotoxic chemicals to tumours - releasing agent by heating above m.pt. of encapsulating resin
Patent Assignee: UNIV OF SCRANTON (UYSC-N)
Inventor: JOYCE P J
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 4558690	A	19851217	US 82343011	A	19820126	198602	B

Priority Applications (No Type Date): US 82343011 A 19820126
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 4558690	A		5		

Abstract (Basic): US 4558690 A

A method for treatment of tumours in animals and humans comprises (a) elevating the temp. of the tumour with exposure to a nonionising **radiofrequency** field to partially necrose and attenuate the cells, (b) **injecting** intratumorally and extracellularly into the tumour interstices a therapeutic dose of a tumoricidal agent encapsulated with a polymeric coating of a biologically inert thermoplastic resin having a m.pt. higher than the temp. of the surrounding body tissue and within the elevated temp. range of the tumour, and (c) activating the tumoricidal agent by heating within the tumour interstices above the m.pt. of the encapsulating resin to release the agent within the tumour interstices without exposing the remaining normal body tissue to the effects of the agent. The encapsulating polymer is pref. an acrylate resin, esp. polystearyl acrylate and has m.pt. of 40-46 deg.C. The tumoricidal agent is e.g. methotrexate.

USE/ADVANTAGE - The process can be used for the treatment of e.g. squamous cell carcinoma and adenocarcinoma of the ovary and lung. Outside the tumour no cell necrosis occurs since all of the cytotoxic impact of the killer chemicals are contained within the neoplasm leaving the phagocytic cells of the systemic circulation free to proliferate and control metastatic spread

Title Terms: ADMINISTER; CYTOSTATIC; CHEMICAL; TUMOUR; RELEASE; AGENT; HEAT ; ABOVE; ENCAPSULATE; RESIN
Derwent Class: A96; B07; C03; P31; P34
International Patent Class (Additional): **A61B-019/00** ; A61M-005/00
File Segment: CPI; EngPI
?

```
Set     Items   Description
S1    6644013   CONDUCT??? OR ELECTROCONDUCT? OR ELECTRIC? OR ELECTRONI???
S2    1933035   SALIN? OR RINGER? ? OR ACETIC?()ACID??? OR VINEGAR? OR ETH-
            ANO? OR SALT???
S3    1317976   GEL OR GELS OR JELLY OR JELLIES OR GELATUM? OR GELATIN???
S4     979214   MICROBUBBLE? OR MICRO()BUBBLE? OR CAPSUL?? OR ENCAPSUL? OR
            MICROSPHER? OR MICROBEAD? OR MICROCAPSUL? OR GLOBUL? OR QUANT-
            UM()(DOT OR DOTS) OR BEAD???
S5    8956873   INJECT? OR INFUS??? OR INTRODUC???? OR INTRO()DUC???? OR A-
            DMINIST?
S6     423451   NEEDL? OR SYRINGE? OR HOLLOW??? OR HYPODERMIC? OR HYPO()DE-
            RMIC?
S7    1013309   RADIO()FREQUENC? OR RF OR RADIOFREQUENC? OR ELECTROMAGNET?
            OR ELECTRO()MAGNET? OR RADIO()(WAVE? ? OR ENERGY)
S8    1943194   HYPERTHERM? OR THERMAL? OR RADIAN?()ENERG???
S9    7524845   PY=2001:2002
S10   9194457   PY=2003:2005
S11     12178   S1(5N)S3
S12       295   S11 (S) S5:S6
S13        20   S12 (S) S7:S8
S14         9   RD (unique items)
S15     28832   S1(7N)S3:S4
S16      1235   S15(S)S5:S6
S17        94   S16(S)S7:S8
S18        74   S17 NOT S13
S19        44   S18 NOT S9:S10
S20        33   RD (unique items)
S21     21625   S2(7N)S3:S4
S22      2624   S21(S)S5:S6
S23        87   S22 (S) S7:S8
S24        33   S23 NOT S9:S10
S25        20   RD (unique items)
S26        30   S24 NOT (S13 OR S19)
S27        17   RD (unique items)
S28    283166   S1:S2(7N)S5:S6
S29      3257   S28 (S) S7
S30    242717   S1:S2(5N)S5:S6
S31      1388   S30 (10N) S7
S32       654   S31 NOT S9:S10
S33        15   S32 (S) S3:S4
S34        13   S33 NOT (S24 OR S19 OR S13)
S35         4   RD (unique items)
? show files
File   2:INSPEC 1969-2005/Jun W2
         (c) 2005 Institution of Electrical Engineers
File   5:Biosis Previews(R) 1969-2005/Jun W3
         (c) 2005 BIOSIS
File   6:NTIS 1964-2005/Jun W2
         (c) 2005 NTIS, Intl Cpyrght All Rights Res
File  34:SciSearch(R) Cited Ref Sci 1990-2005/Jun W3
         (c) 2005 Inst for Sci Info
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
File  35:Dissertation Abs Online 1861-2005/May
         (c) 2005 ProQuest Info&Learning
File  73:EMBASE 1974-2005/Jun 21
         (c) 2005 Elsevier Science B.V.
File  94:JICST-EPlus 1985-2005/May W1
         (c)2005 Japan Science and Tech Corp(JST)
File 144:Pascal 1973-2005/Jun W2
         (c) 2005 INIST/CNRS
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14/3,K/9 (Item 1 from file: 149)
DIALOG(R)File 149:TGG Health&Wellness DB(SM)

02581739 SUPPLIER NUMBER: 131079979 (USE FORMAT 7 OR 9 FOR FULL TEXT
)
Radiofrequency ablation of pulmonary tumors and normal lung tissue in swine and rabbits *.(laboratory and clinical investigation)
Nomori, Hiroaki; Imazu, Yoshihiro; Watanabe, Kenichi; Ohtsuka, Takashi; Naruke, Tsuguo; Kobayashi, Toshiaki; Suemasu, Keiichi
Chest, 127, 3, 973(5)
March,
2005
PUBLICATION FORMAT: Magazine/Journal; Refereed ISSN: 0012-3692
LANGUAGE: English RECORD TYPE: Fulltext TARGET AUDIENCE: Professional
WORD COUNT: 3372 LINE COUNT: 00264

... was kept at 37(degrees)C. A total of 1.5 mL of mixture was **injected** into the peripheral lung using a 19-gauge **needle** to make a spherical nodule measuring about 1.5 cm in diameter (Fig 1). RFA was **conducted** on a total of 10 **gelatin** nodules in the two swine. Under visual inspection and manipulation, a 17-gauge, 2-cm, active-tip **RF** electrode was inserted directly into the center of each nodule. The **RF** energy was increased in a stepwise manner beginning at 15 W/min up to a...
?

20/5/12 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0012612981 BIOSIS NO.: 200000331294
Thermosensitive liposomes and localised hyperthermia: An effective bimodality approach for tumour management
AUTHOR: Sandip B Tiwari; Udupa N (Reprint); Rao B S S; Devi P Uma
AUTHOR ADDRESS: Department of Pharmaceutics, College of Pharmaceutical Sciences, Manipal, 576 119, India**India
JOURNAL: Indian Journal of Pharmacology 32 (3): p214-220 June, 2000 2000
MEDIUM: print
ISSN: 0253-7613
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: Objectives: To entrap methotrexate (MTX) in thermosensitive liposomes, to characterise liposomes for different physicochemical properties and to investigate the potential of liposome entrapped MTX and localised **hyperthermia** (HT) in management of melanoma B16F1. Methods: Thermosensitive liposomes, made of synthetic lipids (distearoylphosphatidylcholine, DSPC and dipalmitoylphosphatidylcholine, DPPC) showing gel to liquid phase transition at 41degreeC, were used for encapsulation of methotrexate. The liposomes were prepared by reverse phase evaporation method. The entrapment efficiency of the drug within the liposomes was determined by gel filtration on Sephadex G-50 column. The in vitro release studies of the vesicles were conducted by incubating the drug encapsulated liposomes in saline at various temperatures for 15 min. The vesicle stability was assessed by storage at room temperature, 37degreeC and under refrigeration (4degreeC) for a period of three months. The MTX containing liposomes were **administered** intravenously to C57BL/6J mice bearing melanoma B16F1 tumour at 12 mg kg-1 dose. Immediately after the drug **administration** , localised **hyperthermia** treatment was applied by placing the tumours in water bath at 43degreeC either for 30 min. or 1 hr. The volume doubling time and growth delay of the tumour were taken as parameters to assess the antitumour efficacy. Results: The thermosensitive liposomes encapsulated about 52% of the MTX. Comparison of the drug release profile at various temperatures revealed that maximum drug release (83%) occurred at 42degreeC compared to less than 5% release at 37degreeC. Better stability on storage was also observed with thermosensitive MTX liposomes. The thermosensitive liposomes and localised **hyperthermia** produced an improved anticancer activity as evident by enhanced volume doubling time and growth delay. Conclusion: These results suggest that localised **hyperthermia** in combination with temperature sensitive liposome encapsulated MTX may serve as a useful targeted drug delivery system for more effective management of melanoma B16F1.

REGISTRY NUMBERS: 59-05-2: methotrexate
DESCRIPTORS:
MAJOR CONCEPTS: Biochemistry and Molecular Biophysics; Pharmacology; Tumor Biology
BIOSYSTEMATIC NAMES: Muridae--Rodentia, Mammalia, Vertebrata, Chordata, Animalia
ORGANISMS: C57BL/J mouse (Muridae)
COMMON TAXONOMIC TERMS: Animals; Chordates; Mammals; Nonhuman Vertebrates ; Nonhuman Mammals; Rodents; Vertebrates
DISEASES: melanoma--neoplastic disease
MESH TERMS: Melanoma (MeSH)
CHEMICALS & BIOCHEMICALS: methotrexate--antineoplastic-drug,

intravenous administration, thermosensitive liposome encapsulated; thermosensitive liposomes--physicochemical properties
METHODS & EQUIPMENT: localized hyperthermia--therapeutic method
CONCEPT CODES:
22002 Pharmacology - General
10060 Biochemistry studies - General
10502 Biophysics - General
23001 Temperature - General measurement and methods
24002 Neoplasms - General
12512 Pathology - Therapy
18501 Integumentary system - General and methods
BIOSYSTEMATIC CODES:
86375 Muridae

20/5/27 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE

10755157 EMBASE No: 2000235961
Thermosensitive liposomes and localised hyperthermia - An effective bimodality approach for tumour management
Tiwari Sandip B.; Udupa N.; Rao B.S.S.; Uma Devi P.
N. Udupa, Department of Pharmaceutics, College of Pharmaceutical Sciences, Manipal 576 119 India
Indian Journal of Pharmacology (INDIAN J. PHARMACOL.) (India) 2000, 32/3 (214-220)
CODEN: INJPD ISSN: 0253-7613
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 25

Objectives: To entrap methotrexate (MTX) in thermosensitive liposomes, to characterise liposomes for different physicochemical properties and to investigate the potential of liposome entrapped MTX and localised **hyperthermia** (HT) in management of melanoma B16F1. Methods: Thermosensitive liposomes, made of synthetic lipids (distearoylphosphatidylcholine, DSPC and dipalmitoylphosphatidylcholine, DPPC) showing gel to liquid phase transition at 41degreeC, were used for encapsulation of methotrexate. The liposomes were prepared by reverse phase evaporation method. The entrapment efficiency of the drug within the liposomes was determined by gel filtration on Sephadex G-50 column. The in vitro release studies of the vesicles were **conducted** by incubating the drug **encapsulated** liposomes in saline at various temperatures for 15 min. The vesicle stability was assessed by storage at room temperature, 37degreeC and under refrigeration (4degreeC) for a period of three months. The MTX containing liposomes were **administered** intravenously to C57BL/6J mice bearing melanoma B16F1 tumour at 12 mg kgsup -sup 1 dose. Immediately after the drug **administration** , localised **hyperthermia** treatment was applied by placing the tumours in water bath at 43degreeC either for 30 min. or 1 hr. The volume doubling time and growth delay of the tumour were taken as parameters to assess the antitumour efficacy. Results: The thermosensitive liposomes encapsulated about 52% of the MTX. Comparison of the drug release profile at various temperatures revealed that maximum drug release (83%) occurred at 42degreeC compared to less than 5% release at 37degreeC. Better stability on storage was also observed with thermosensitive MTX liposomes. The thermosensitive liposomes and localised **hyperthermia** produced an improved anticancer activity as evident by enhanced volume doubling time and growth delay. Conclusion: These results suggest that localised **hyperthermia** in combination with temperature

sensitive liposome encapsulated MTX may serve as a useful targeted drug delivery system for more effective management of melanoma B16F1.

DRUG DESCRIPTORS:
*liposome--pharmaceutics--pr; *liposome--pharmacokinetics--pk; *methotrexate--drug therapy--dt; *methotrexate--pharmaceutics--pr; *methotrexate--pharmacokinetics--pk; *methotrexate--intravenous drug administration--iv
MEDICAL DESCRIPTORS:
*melanoma--drug therapy--dt; *drug delivery system; *drug targeting controlled study; mouse; nonhuman; animal model; male; female; temperature sensitivity; hyperthermia; heat treatment; melanoma B16--drug therapy--dt; encapsulation; controlled release formulation; article
CAS REGISTRY NO.: 15475-56-6, 59-05-2, 7413-34-5 (methotrexate)
SECTION HEADINGS:
037 Drug Literature Index
016 Cancer
030 Clinical and Experimental Pharmacology
039 Pharmacy

20/5/28 (Item 1 from file: 94)
DIALOG(R)File 94:JICST-EPlus

04900064 JICST ACCESSION NUMBER: 01A0104758 FILE SEGMENT: JICST-E
Progress of endoscopic tratement for digestive diseases-endoscopic local coagulation therapy for liver cancer, MCT,RFA,EIT
BEPPU TOORU (1); MATSUDA TEISHI (1); MAEDA TAKEHARU (1); ISHIKO TAKATOSHI (1); HIROTA MASAHIKO (1); OGAWA MICHIO (1)
(1) Kumamoto Univ., Med. Sch.
Karento Terapi(Current Therapy), 2000, VOL.18,NO.12, PAGE.2177-2181, FIG.3, TBL.2, REF.23
JOURNAL NUMBER: G0171BAC ISSN NO: 0287-8445
UNIVERSAL DECIMAL CLASSIFICATION: 616-006-08 616.3-006
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Journal
ARTICLE TYPE: Commentary
MEDIA TYPE: Printed Publication
ABSTRACT: Current status of endoscopic local coagulation therapy for liver cancer are summarized, and selective use of this method is described. 3 cm or less of tumor in diameter and 3 or less tumors are indicated for this method. Approaches, using pneumoscope or laparoscope,are selected according to position of tumor. Microwave coagulation is the first choice for a superficial liver cancer. In the cases with a risk of complications, such as profundus type, extrahepatic growth type or contiguity to Glisson **capsule** , this method is **conducted** with **radio - wave** coagulation or ethanol **injection** therapy. It is recommended to select and combine therapies according to each patient.
DESCRIPTORS: human(primates); liver tumor; endoscopic surgery; microwave irradiation; radio wave; high frequency therapy; ablation; aliphatic alcohol; local administration
BROADER DESCRIPTORS: liver disease; digestive system disease; disease; digestive system tumor; tumor; operative surgery; electromagnetic irradiation; irradiation; electromagnetic wave; wave motion; physical therapy; therapy; alcohol; hydroxy compound; administration route; administration(biology)
CLASSIFICATION CODE(S): GE03031L; GH04000D
?

27/5/2 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0012517087 BIOSIS NO.: 200000235400
Thermochemotherapy: Synergism between hyperthermia and liposomal bleomycin in mice bearing melanoma B16F1
AUTHOR: Tiwari Sandip B; Udupa Venkatesh N (Reprint); Rao Satish; Devi P Uma
AUTHOR ADDRESS: Department of Pharmaceutics, College of Pharmaceutical Sciences, Manipal, 576 119, India**India
JOURNAL: Pharmacy and Pharmacology Communications 6 (1): p19-23 Jan., 2000 2000
MEDIUM: print
ISSN: 1460-8081
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: This study was aimed at enhancing the antitumour efficacy of bleomycin by encapsulating it in temperature-sensitive liposomes and using it in combination with localized **hyperthermia** of tumours for targeted delivery. Large unilammelar vesicles (LUV) made of synthetic lipids (disteroyl phosphatidylcholine and dipalmitoyl phosphatidylcholine) showing gel-to-liquid phase transition at 41degreeC, were used to encapsulate bleomycin. Comparison of LUV when incubated in saline at various temperatures revealed that maximum drug release (80%) occurred at 42degreeC compared with less than 5% release at 37degreeC. Better stability during storage was also observed with thermosensitive bleomycin liposomes. When **administered** intravenously to C57BL/6J mice bearing melanoma B16F1 tumour at 10 mg kg-1 dose, liposomal bleomycin in combination with **hyperthermia** (43degreeC, 30 min or 1 h) exhibited improved anticancer activity as evident by the enhanced volume doubling time and growth delay compared with animals treated with an equivalent dose of free bleomycin with or without **hyperthermia** . The results suggest that **hyperthermia** in combination with bleomycin encapsulated in temperature sensitive liposomes may be a useful targeted drug delivery system for more effective management of melanoma B16F1.

REGISTRY NUMBERS: 11056-06-7: bleomycin; 63-89-8Q: dipalmitoyl phosphatidylcholine; 2644-64-6Q: dipalmitoyl phosphatidylcholine
DESCRIPTORS:
MAJOR CONCEPTS: Pharmacology; Tumor Biology
BIOSYSTEMATIC NAMES: Muridae--Rodentia, Mammalia, Vertebrata, Chordata, Animalia
ORGANISMS: mouse (Muridae)
ORGANISMS: PARTS ETC: unilammelar vesicles
COMMON TAXONOMIC TERMS: Animals; Chordates; Mammals; Nonhuman Vertebrates ; Nonhuman Mammals; Rodents; Vertebrates
DISEASES: hyperthermia--disease-miscellaneous, localized, synergism; melanoma--neoplastic disease, melanoma B16F1 tumour
MESH TERMS: Melanoma (MeSH)
CHEMICALS & BIOCHEMICALS: bleomycin--antineoplastic-drug, liposomal, synergism; dipalmitoyl phosphatidylcholine--synthetic lipid; disteroyl phosphatidylcholine--synthetic lipid
METHODS & EQUIPMENT: thermochemotherapy--therapeutic method
CONCEPT CODES:
10068 Biochemistry studies - Carbohydrates
12512 Pathology - Therapy
22002 Pharmacology - General
24004 Neoplasms - Pathology, clinical aspects and systemic effects

24008 Neoplasms - Therapeutic agents and therapy
BIOSYSTEMATIC CODES:
86375 Muridae

```
Set      Items   Description
S1     5708885   CONDUCT??? OR ELECTROCONDUCT? OR ELECTRIC? OR ELECTRONI???
             OR ELECTROLY???
S2      338271   SALIN? OR RINGER? ? OR ACETIC?()ACID??? OR VINEGAR? OR ETH-
             ANO? OR SALT???
S3      102443   GEL OR GELS OR JELLY OR JELLIES OR GELATUM? OR GELATIN???
S4      132441   MICROBUBBLE? OR MICRO()BUBBLE? OR CAPSUL?? OR ENCAPSUL? OR
             MICROSPHER? OR MICROBEAD? OR MICROCAPSUL? OR GLOBUL? OR QUANT-
             UM()(DOT OR DOTS) OR BEAD???
S5     5704880   INJECT? OR INFUS??? OR INTRODUC???? OR INTRO()DUC???? OR A-
             DMINIST?
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             RMIC?
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             OR ELECTRO()MAGNET? OR RADIO()(WAVE? ? OR ENERGY)
S8      208574   HYPERTHERM? OR THERMAL? OR RADIAN?()ENERG???
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S12          0   S12(S)S5:S6
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S17         25   S16 NOT S14
S18         20   RD (unique items)
S19         13   S18 NOT S9:S10
S20       6238   S1:S2(7N)S3:S4
S21        620   S20 (S)S5:S6
S22         38   S21(S)S7:S8
S23          6   S22 NOT (S14 OR S17)
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File  16:Gale Group PROMT(R) 1990-2005/Jun 23
         (c) 2005 The Gale Group
File 160:Gale Group PROMT(R) 1972-1989
         (c) 1999 The Gale Group
File 148:Gale Group Trade & Industry DB 1976-2005/Jun 23
         (c)2005 The Gale Group
File 621:Gale Group New Prod.Annou.(R) 1985-2005/Jun 23
         (c) 2005 The Gale Group
File 441:ESPICOM Pharm&Med DEVICE NEWS 2005/May W4
         (c) 2005 ESPICOM Bus.Intell.
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15/9/1 (Item 1 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)

09478857 Supplier Number: 83356316 (THIS IS THE FULLTEXT)
Prosurg (San Jose, California) received FDA marketing clearance for radiofrequency (RF) gel electrosurgical probes and devices. (Product Briefs).(Brief Article)
The BBI Newsletter, v25, n2, p56(1)
Feb, 2002
ISSN: 1049-4316
Language: English Record Type: Fulltext
Article Type: Brief Article
Document Type: Newsletter; Trade
Word Count: 160
TEXT:
* Prosurg (San Jose, California) received FDA marketing clearance for **radiofrequency** (**RF**) gel electrosurgical probes and devices. Prosurg developed the **RF** gel electrosurgical technology platform for the microinvasive, endoscopic treatment of controlled tissue ablation. **RF** gel technology represents significant potential for an image guided and controlled tissue ablation treatment of urological, gynecological and general surgical disorders. The **conductive RF gel** is safe, biocompatible and visible under ultrasound, computed tomography and magnetic resonance imaging during endoscopic procedures. Physicians can create 3-D, interactive **RF** gel electrodes of any shape and size under real time image guidance to achieve desired tissue ablation zones by controlling the **injection** volume of the **conductive RF gel** . The **RF gel** device consists of an 18-gauge **needle** probe with a proximal **RF** connector and delivery port for the **conductive gel** . The technology can create a larger zone of tissue necrosis compared to conventional **RF** e lectrodes.

PUBLISHER NAME: Medical Economics/Thomson Healthcare
COMPANY NAMES: *Prosurg
DESCRIPTORS: *United States. Food and Drug Administration
EVENT NAMES: *331 (Product development); 940 (Government regulation (cont))
GEOGRAPHIC NAMES: *1USA (United States)
PRODUCT NAMES: *3841010 (Electronic Medical Equip)
INDUSTRY NAMES: BUSN (Any type of business); HLTH (Healthcare - Medical and Health)
SIC CODES: 3840 (Medical Instruments and Supplies)
NAICS CODES: 334510 (Electromedical and Electrotherapeutic Apparatus Manufacturing)
SPECIAL FEATURES: COMPANY

15/9/2 (Item 2 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)

09327509 Supplier Number: 81298235 (THIS IS THE FULLTEXT)
Prosurg, Inc. Receives the FDA Marketing Clearance For RF gel Electrosurgical Probes & Devices.
PR Newswire, pSFF01804012002
Jan 4, 2002
Language: English Record Type: Fulltext
Document Type: Newswire; Trade

Word Count: 517
TEXT:
SAN JOSE, Calif. -- Prosurg, Inc. (http://www.prosurg.com/) today announced receipt of marketing clearance from the U.S. Food and Drug Administration (FDA) for RF gel Electrosurgical Probes & Devices.

Prosurg, Inc. has developed an innovative **RF** gel Electrosurgical technology platform for the microinvasive, endoscopic treatment of controlled tissue ablation. The **RF** gel technology represents significant potential for an image guided and controlled tissue ablation treatment of urological, gynecological and general surgical disorders. The **conductive RF gel** is safe, biocompatible and visible under Ultrasound, CT and MRI imaging during endoscopic procedures. Physicians can create three dimensional, interactive **RF** gel electrodes of any shape and size under "Real Time" image guidance to achieve desired tissue ablation zones just by controlling the **injection** volume of the **conductive RF gel** .

The **RF gel** device consists of an 18-gauge **needle** probe with a proximal **RF** connector and delivery port for the **conductive RF gel** . The **RF gel** electrode enhances the **conduction** of **RF** energy and creates a controlled zone of necrosis in the target tissue for optimum clinical outcome and patient safety. The **RF** gel technology can create a larger zone of tissue necrosis compared to conventional **RF** electrodes. **RF** gel products are safe, versatile and cost effective -- eliminating any need for costly multiple array electrodes and custom **RF** generators. The **RF** gel device is compatible with all of the commercially available **RF** generators, including Valley Lab, Conmed, Bard, ERBE and others.

"We are very pleased by the FDA review and marketing clearance of the RF gel Electrosurgical Probes & Devices for controlled tissue ablation," stated Ashvin Desai, Prosurg President and CEO. "The RF gel technology platform in conjunction with 'Real Time' imaging guidance capabilities, represent a significant breakthrough in microinvasive surgery. The RF gel Electrosurgical Probes & Devices offer cost effective alternatives and universal compatibility with RF generator installations all over the world. The RF gel Electrosurgical Probes & Devices can be used for laparoscopic, hysteroscopic, cystoscopic and other endoscopic procedures, including Prostate surgery, BPH and other soft tissue removal."

The RF gel Electrosurgical Probes & Devices have been used in clinical studies by leading physicians under imaging guidance for endoscopic treatment of prostate, BPH, kidney tumors, liver tumors and uterine fibroids with excellent clinical outcomes. More than 20 million endoscopic surgical procedures for tissue ablation are carried out on a worldwide basis. RF gel technology is ideally positioned to offer a safe and cost-effective treatment option to physicians, patients and healthcare providers.

Prosurg, Inc. is headquartered in Silicon Valley, California, designs, manufactures and markets single use products for management of urological and gynecological disorders. Prosurg, Inc. plans to distribute the RF gel technology-based products through its worldwide network of distributors and marketing partners.

For additional information regarding company and products, please visit ww.prosurg.com.

MAKE YOUR OPINION COUNT - Click Here
http://tbutton.prnewswire.com/prn/11690X64174302

Contact: Ashvin Desai of Prosurg, Inc., +1-408-945-4044, or ashvin@prosurg.com

Website: http://www.prosurg.com/

PUBLISHER NAME: PR Newswire Association, Inc.
INDUSTRY NAMES: BUS (Business, General); BUSN (Any type of business)
?

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            RMIC?
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S5     101102   GEL OR GELS OR JELLY OR JELLIES OR GELATUM? OR GELATIN???
S6     130246   MICROBUBBLE? OR MICRO()BUBBLE? OR CAPSUL?? OR ENCAPSUL? OR
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S12        16   S11 NOT S7:S8
S13     15241   S1:S2(10N)S5:S6
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S19        27   S18 AND (S3 OR S5)
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S21        50   S13 (10N) S4
S22        40   S21 NOT S7:S8
S23        29   RD (unique items)
S24      7227   LIPOSOME? OR LIPO()SOME? ?
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S28         7   RD (unique items)
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S30         5   S29 (10N) S5
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File  16:Gale Group PROMT(R) 1990-2005/Jun 22
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File 160:Gale Group PROMT(R) 1972-1989
         (c) 1999 The Gale Group
File 148:Gale Group Trade & Industry DB 1976-2005/Jun 22
         (c)2005 The Gale Group
File 621:Gale Group New Prod.Annou.(R) 1985-2005/Jun 22
         (c) 2005 The Gale Group
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08013956 Supplier Number: 66165063 (THIS IS THE FULLTEXT)

BSD Medical Receives FDA Approval for Ovarian Cancer Study at Duke University.

PR Newswire, p4602
April 25, 2000
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 540

TEXT:

SALT LAKE CITY, April 25 /PRNewswire/ --

BSD Medical Corp. (OTC Bulletin Board: BSDM) announced today that it has received approval from the U.S. Food and Drug Administration (FDA) for Phase I/II clinical studies of hyperthermia in combination with liposome encapsulated doxorubicin for the treatment of ovarian cancer. These studies will be conducted by Duke University using protocols designed by leading hyperthermia researchers at Duke. Hyperthermia will be administered using BSD Medical's advanced BSD-2000 deep regional phased array hyperthermia system. Doxil(R), the FDA approved liposomes that will be used for the study, are produced by ALZA Pharmaceuticals. Drs. Ellen Jones and Leonard Prosnitz of Duke University Medical Center are the principal investigators for the study.

The object of the heat-triggered treatment is to deliver the chemotherapy drug directly to the tumor, thus increasing treatment effectiveness and reducing treatment toxicity. Encapsulated liposome drug delivery treatment uses a chemotherapy drug enclosed in a membrane. When the **injected** drug-bearing **capsule** reaches the tumor site, the **capsule** is "melted" by the use of **hyperthermic** temperatures precisely targeted to the tumor using the focused, phased array heating capabilities of the BSD-2000 system. Thus, the drug is released directly into the tumor. Preclinical studies have shown that the use of hyperthermia increases both drug delivery to the tumor and the anti-tumor effect of the drug. A five- to 15-fold increase has been seen in the doxorubicin concentration in tumor cells using hyperthermia and the liposomal drug delivery method, compared to free doxorubicin and heat. One hypothesis of this study is that the response rate using the combination of Doxil(R) and hyperthermia will be increased to greater than 50%, as compared to historical response rates of 25% for other ovarian cancer treatments.

Hyrum A. Mead, President of BSD Medical Corporation said, "We are keenly interested in this study because it opens the door to a completely new application of our technology in oncology therapy. Hyperthermia has traditionally been used to enhance the efficacy of radiation. As substantial as the emerging opportunity in radiation therapy is, there are five times as many cancer patients who receive chemotherapy than patients who receive radiation. We are excited about the Duke University studies testing the contribution of hyperthermia in increasing the effectiveness of the sophisticated delivery of chemotherapy through liposomes."

BSD Medical Corporation (BSDM) is the leading developer and manufacturer of hyperthermia systems for cancer therapy, and pioneer of the non-surgical treatment of benign diseases of the prostate (BPH) using microwave energy for thermotherapy. For further information on BSD and its products or to find hyperthermic oncology information sources and treatment centers, visit the BSD Medical Corporation web site (www.bsdmc.com) or contact: de Jong & Associates, Ron de Jong, 345 S. Coast Hwy. 101, Ste E, Encinitas, CA 92024, Phone (760) 943-9065, Toll free (877) 943-9065, Fax (760) 943-7164, e-mail bsdm@dejong.org , http://www.dejong.org .

Statements contained in this press release that are not historical facts are forward looking statements, as that item is defined in the

Private Securities Litigation Reform Act of 1995. Such forward-looking statements are subject to risks and uncertainties (detailed in the Company's findings with the Securities and Exchange Commission) that could cause actual results to differ materially from estimated results.

PUBLISHER NAME: PR Newswire Association, Inc.
COMPANY NAMES: *BSD Medical Corp.
PRODUCT NAMES: *3841500 (Therapeutic Hospital Equip)
INDUSTRY NAMES: BUS (Business, General); BUSN (Any type of business)
SIC CODES: 3840 (Medical Instruments and Supplies)
NAICS CODES: 33911 (Medical Equipment and Supplies Manufacturing)
TICKER SYMBOLS: BSDM
SPECIAL FEATURES: COMPANY

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             RMIC?
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S33         49   S10 AND S3
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S35         33   S34 NOT S7:S8
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S40        118   S39 NOT S7:S8
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S42         54   RD (unique items)
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File   6:NTIS 1964-2005/Jun W2
         (c) 2005 NTIS, Intl Cpyrght All Rights Res
File  34:SciSearch(R) Cited Ref Sci 1990-2005/Jun W3
         (c) 2005 Inst for Sci Info
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
File  35:Dissertation Abs Online 1861-2005/May
         (c) 2005 ProQuest Info&Learning
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12/5/1 (Item 1 from file: 2)
DIALOG(R)File 2:INSPEC

6295035 INSPEC Abstract Number: A1999-16-8760G-001, B1999-08-7520C-035
Title: Mapping and radiofrequency ablation of ventricular tachycardia
Author(s): Greenspon, A.J.
Author Affiliation: Jefferson Med. Coll., Philadelphia, PA, USA
Conference Title: Proceedings of the 19th Annual International Conference of the IEEE Engineering in Medicine and Biology Society. `Magnificent Milestones and Emerging Opportunities in Medical Engineering' (Cat. No.97CH36136) Part vol.6 p.2629 vol.6
Publisher: IEEE, Piscataway, NJ, USA
Publication Date: 1997 Country of Publication: USA 6 vol. ix+2819 pp.
ISBN: 0 7803 4262 3 Material Identity Number: XX-1999-00663
U.S. Copyright Clearance Center Code: 0 7803 4262 3/97/$10.00
Conference Title: Proceedings of the 19th Annual International Conference of the IEEE Engineering in Medicine and Biology Society. `Magnificent Milestones and Emerging Opportunities in Medical Engineering'
Conference Sponsor: IEEE
Conference Date: 30 Oct.-2 Nov. 1997 Conference Location: Chicago, IL, USA
Language: English Document Type: Conference Paper (PA)
Treatment: Experimental (X)
Abstract: **Radiofrequency** catheter ablation has become the nonpharmacologic treatment of choice in patients with a variety of supraventricular arrhythmias. Small discrete lesions are produced by delivering 20-40 W of unmodulated 500 kHz **RF** energy to the tip of a standard 4 mm electrode catheter. Resistive heating of cardiac tissue occurs at the point of tissue contact. Successful treatment of these arrhythmias may be achieved in greater than 90% of cases. The results of **RF** catheter ablation for the treatment of ventricular tachycardia (VT) are variable. **RF** catheter ablation in patients with normal hearts who may have either idiopathic left VT arising from right ventricular outflow tract is highly effective with success rates approaching 100%. These tachycardias usually arise from a small focus and therefore the area required for ablation is small and easy to target. Unfortunately, most patients who have VT have abnormal ventricular function, frequently a previous myocardial infarction. In these patients, the tachycardia circuits may be large and complex. The efficacy rate of **RF** ablation for VT using current technology is much lower. This presentation will focus on our development of a strategy for successful ablation of VT post myocardial infarction (MI). Accurate analysis of the VT substrate is crucial for successful ablation. A post-MI model of sustained VT was created in swine by **injecting** agarose **gel beads** following PTCA balloon occlusion of the LAD coronary artery. Surviving animals returned for programmed electrical stimulation 4-6 weeks later. Stable sustained VT was induced in 35 animals. This VT could be reproducibly initiated and terminated. A multielectrode "basket" catheter was percutaneously inserted prior to VT induction to map endocardial electrical activation. The "basket" catheter (Constellation, EP Technologies, Sunnyvale, CA) consists of eight self-expanding nitinol struts with 64 symmetrically arranged electrodes. The catheter is capable of both recording and pacing. Using this system we prospectively analyzed the induced VTs in these animals. Bipolar endocardial signals were obtained from the catheter during sinus rhythm and VT. Signals were filtered at 30-500 Hz and recorded multichannel recorder (EP LabSystem, Corp.). Endocardial recordings demonstrated fractionated electrical activity in the zone of infarction during sinus rhythm. Early presystolic activity was recorded during VT as well as middiastolic potentials. Reset of VT was seen in 5 animals. Features of classic entrainment as well as concealed

entrainment were demonstrated in 12 animals. These features suggest that the mechanism of VT is endocardial reentry, as in humans. **RF** ablation was performed by guiding a large-tip ablation catheter to the appropriate "basket" electrode by means of a "homing device" Successful **RF** ablation of VT was demonstrated in this model. Computer algorithms for analysis of the zone of slow conduction are being developed. Clinical post-myocardial-infarction VT is now mapped and treated in patients using this system. (0 Refs)

Subfile: A B

Descriptors: bioelectric potentials; biological tissues; biomedical electrodes; biothermics; cardiology; radiation therapy; radiofrequency heating

Identifiers: radiofrequency catheter ablation; nonpharmacologic treatment ; supraventricular arrhythmias; ventricular tachycardia mapping; small discrete lesions; unmodulated 500 kHz RF energy; standard 4 mm electrode catheter tip; resistive heating; cardiac tissue; tissue contact; normal hearts; idiopathic left VT; right ventricular outflow tract; small focus; abnormal ventricular function; myocardial infarction; tachycardia circuits; efficacy rate; 20 to 40 W; 500 kHz; 4 mm

Class Codes: A8760G (Microwaves and other electromagnetic waves (medical uses)); A8750E (Bio-optics (effects of microwaves, light, laser and other electromagnetic waves)); A8716 (Biothermics); A8770H (Radiation therapy); A8730C (Electrical activity in neurophysiological processes); A8770F (Electrodiagnostics); B7520C (Radiation therapy); B7510D (Bioelectric signals)

Numerical Indexing: power 2.0E+01 to 4.0E+01 W; frequency 5.0E+05 Hz; size 4.0E-03 m

12/5/2 (Item 1 from file: 5)

0012323252 BIOSIS NO.: 200000041565

Insights into the mechanism of sustained ventricular tachycardia after myocardial infarction in a closed chest porcine model using a multielectrode "basket" catheter

AUTHOR: Greenspon Arnold J (Reprint); Hsu Steve S; Borge Richard; Smith Michael F; Eldar Michael

AUTHOR ADDRESS: Cardiac Electrophysiology Laboratory, Jefferson Medical College, 1025 Walnut Street, Room 403, Philadelphia, PA, 19107, USA**USA

JOURNAL: Journal of Cardiovascular Electrophysiology 10 (11): p1501-1516 Nov., 1999 1999
MEDIUM: print
ISSN: 1045-3873
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: Introduction: Accurate analysis of the arrhythmia substrate is important for successful radiofrequency ablation of sustained ventricular tachycardia (VT) after myocardial infarction (MI). Methods and Results: A multielectrode "basket" catheter capable of endocardial recording and pacing was inserted percutaneously into the left ventricle of post-MI swine for analysis of the mechanism of sustained VT. Sustained VT was induced in 42 of 61 pigs that survived an acute MI produced by percutaneous transluminal coronary angioplasty balloon occlusion of the left anterior descending coronary artery and injection of agarose **gel beads** . A multielectrode "basket" catheter (Constellation(R)) with 64 electrodes was inserted in 35 of these animals for analysis of the VT.

Induced VT had a cycle length of 179 +- 25 msec at control and 230 +- 43 msec after **administration** of intravenous procainamide. Presystolic electrical activity was recorded from at least 1 of 32 bipolar pairsof electrodes at a mean 40.7 +- 23.6 msec prior to QRS onset. Isolated mid-diastolic potentials were recorded in 26 of 35 animals. In 22 animals, there were multiple isolated potentials recorded from adjacent electrode pairs. Isochronal maps demonstrated that these potentials returned to the systolic site of origin. Resetting of sustained VT by single premature ventricular stimuli was observed in 6 of 12 animals. Entrainment with overdrive pacing was seen in 19 of 26 animals with induced VT. Concealed entrainment was observed in ten animals. The mean stimulus to QRS interval was 45 +- 28 msec. Concealed entrainment was observed from adjacent electrode pairs with different stimulus to QRS intervals. Conclusion: These data suggest that sustained VT in this model is due to reentry with an excitable gap. A multielectrode "basket" catheter is useful for analyzing the zone of slow conduction participating in the tachycardia circuit. Such analysis may provide useful information to guide successful catheter ablation of sustained VT after MI.

REGISTRY NUMBERS: 51-06-9: procainamide
DESCRIPTORS:
MAJOR CONCEPTS: Equipment, Apparatus, Devices and Instrumentation; Cardiovascular System--Transport and Circulation
BIOSYSTEMATIC NAMES: Suidae--Artiodactyla, Mammalia, Vertebrata, Chordata, Animalia
ORGANISMS: pig (Suidae)--animal model
COMMON TAXONOMIC TERMS: Animals; Artiodactyls; Chordates; Mammals; Nonhuman Vertebrates; Nonhuman Mammals; Vertebrates
DISEASES: myocardial infarction--heart disease, vascular disease; ventricular tachycardia--heart disease, cycle length, induced, reentry, sustained
MESH TERMS: Myocardial Infarction (MeSH); Tachycardia, Ventricular (MeSH)
CHEMICALS & BIOCHEMICALS: procainamide--antiarrhythmic-drug, intravenous
METHODS & EQUIPMENT: endocardial mapping--analytical method; endocardial pacing--therapeutic method; multielectrode basket catheter--analytical method, medical equipment, percutaneous; radiofrequency ablation--surgical method, therapeutic method
MISCELLANEOUS TERMS: entrainment
CONCEPT CODES:
14501 Cardiovascular system - General and methods
10060 Biochemistry studies - General
11105 Anatomy and Histology - Surgery
22002 Pharmacology - General
12504 Pathology - Diagnostic
12512 Pathology - Therapy
BIOSYSTEMATIC CODES:
85740 Suidae

12/5/3 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE

07223724 EMBASE No: 1998105884
Use of a multielectrode 'basket' catheter for endocardial mapping of ventricular tachycardia
Greenspon A.J.; Hsu S.S.; Ohad D.G.; Eldar M.
A.J. Greenspon, Jefferson Medical College, Philadelphia/Neuf. Card. Res. Inst., Tel Aviv University, Tel Aviv Israel

Journal of Electrocardiology (J. ELECTROCARDIOL.) (United States) 1998 , 30/SUPPL. (5)
CODEN: JECAB ISSN: 0022-0736
DOCUMENT TYPE: Journal; Conference Paper
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

Successful ablation of sustained ventricular tachycardia (VT) following myocardial infarction (MI) depends on an accurate analysis of the arrhythmic substrate. A post-MI porcine model of sustained VT was created by **injecting** agarose **gel beads** (75-150 mum) into the mid-left anterior descending coronary artery following percutaneous transluminal coronary angiographic balloon occlusion in 96 animals. When animals returned for induction and analysis of VT 4-6 weeks post-MI, VT could be induced in 42-61 (68%) of surviving animals; VT cycle length was 179 +/- 25 ms at baseline and 230 +/- 43 ms following intravenous procainamide (P < .001). Endocardial mapping using a multielectrode 'basket' catheter (Constellation, EP Technologies, Sunnyvale CA) was performed in 38 animals. The catheter consists of 64 electrodes symmetrically arranged on eight self-expanding struts. Unipolar pacing was successful from 78 +/- 15% of the electrodes at 3 mA and from an additional 13 +/- 7% at 10 mA. Ventricular tachycardia activation mapping obtained from 32 bipolar pairs recorded earliest ventricular activity 40 +/- 23 ms prior to QRS onset. Isolated mid-diastolic potentials were recorded from 26 animals. Further analysis demonstrated reset response with single premature beats in 6 of 12 classic entrainment in 19, and concealed entrainment in 10. **Radiofrequency (RF)** ablation was attempted in 12 animals. Target sites for **RF** ablation of VT were guided by the results of mapping with the basket catheter, which pointed to a zone of slow conduction. The **RF** energy was delivered to the tip of an 8-mm ablation probe directed to the target site by a custom discrete navigation device, which assessed electrode orientation. Power was regulated to maintain a tip temperature of 70-80degreeC for 60 seconds. Ablation was successful in terminating VT and preventing reinduction of the target VT in 11 of 12 animals. It was concluded that multielectrode basket catheter assists in the rapid analysis of sustained VT following MI and provides important data for successful ablation.

MEDICAL DESCRIPTORS:
*heart ventricle tachycardia--diagnosis--di
catheter; epicardium mapping; swine disease; angiocardiography; heart performance; catheter ablation; radiofrequency; electrode; device; nonhuman ; animal experiment; animal model; controlled study; conference paper; priority journal
SECTION HEADINGS:
018 Cardiovascular Diseases and Cardiovascular Surgery
027 Biophysics, Bioengineering and Medical Instrumentation

42/5/2 (Item 2 from file: 2)
DIALOG(R)File 2:INSPEC

4436990 INSPEC Abstract Number: A9315-8760B-009
Title: A feasibility study on quantitating myocardial perfusion with Albunex, a ultrasonic contrast agent
Author(s): Wilson, B.; Shung, K.K.; Hete, B.; Levene, H.; Barnhart, J.L.
Author Affiliation: Pennsylvania State Univ., University Park, PA, USA
Journal: Ultrasound in Medicine & Biology vol.19, no.3 p.181-91
Publication Date: 1993 Country of Publication: UK
CODEN: USMBA3 ISSN: 0301-5629
U.S. Copyright Clearance Center Code: 0301-5629/93/$6.00+.00
Language: English Document Type: Journal Paper (JP)
Treatment: Experimental (X)
Abstract: A study was undertaken to determine whether ultrasonic backscatter calculated from unprocessed **radio frequency** (**RF**) echoes returned from myocardium could be used to quantitate regional myocardium perfusion. A real-time ultrasonic scanner has been modified and interfaced to a microcomputer to acquire **RF** data at a rate up to 10 frames per second. Preliminary experimental data were obtained from four open-chest dogs following intracoronary injection of a bolus of Albunex and two dogs following intravenous injection with this modified scanner. On one hand, these results indicate that the integrated backscatter measured from the region of myocardium perfused by the coronary artery where Albunex is injected and selected for monitoring initially increases, reaches a peak, and then decreases as the contrast agent is washed out and that the magnitude of the peak is approximately linearly proportional to the volume concentration of Albunex **microspheres injected** , clearly demonstrating the feasibility of this approach for quantitating region myocardial perfusion. However, intravenous injections did not result in many appreciable change in myocardial backscatter in the left ventricle although a respose could be observed in the left ventricular blood pool. (23 Refs)
Subfile: A
Descriptors: cardiology; haemorheology; muscle
Identifiers: regional myocardial perfusion quantification; videodensitometry; unprocessed RF echoes; myocardial echogenicity variation ; Albunex; ultrasonic contrast agent; ultrasonic backscatter; real-time ultrasonic scanner; dogs; intravenous injections; left ventricular blood pool
Class Codes: A8760B (Sonic and ultrasonic radiation); A8770E (Diagnostic methods and instrumentation); A8745F (Rheology of body fluids)

42/5/5 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0012844965 BIOSIS NO.: 200100016804
Hepatocellular carcinoma treated with percutaneous radio-frequency ablation: Usefulness of power Doppler US with a microbubble contrast agent in evaluating therapeutic response: Preliminary results
AUTHOR: Choi Dongil; Lim Hyo K (Reprint); Kim Seung Hoon; Lee Won Jae; Jang Hyun-Jung; Lee Ji Yeon; Paik Seung Woon; Koh Kwang Cheol; Lee Joon Hyoek
AUTHOR ADDRESS: Department of Radiology, Samsung Medical Center, Sungkyunkwan University School of Medicine, 50 Ilwon-Dong, Kang-nam-Ku, Seoul, 135-710, South Korea**South Korea
JOURNAL: Radiology 217 (2): p558-563 November, 2000 2000
MEDIUM: print
ISSN: 0033-8419

DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: PURPOSE: To evaluate the usefulness of power Doppler ultrasonography (US) with a microbubble contrast agent in assessing the therapeutic response of hepatocellular carcinomas (HCCs) treated with percutaneous radio-frequency (RF) ablation. MATERIALS AND METHODS: Forty patients with 45 nodular HCC lesions 1.0-3.8 cm in diameter underwent power Doppler US before and after intravenous **injection** of a **microbubble** contrast agent. The same procedures were repeated after US-guided percutaneous **RF** ablation. The results of these studies were compared with those of three-phase helical computed tomography (CT) performed immediately after **RF** ablation. RESULTS: Before **RF** ablation, nonenhanced power Doppler US demonstrated flow signals within tumor in 33 of 45 HCCs. After contrast agent administration, flow signals increased or newly appeared in all cases. After **RF** ablation, none of the ablated tumors showed intratumoral flow signals at nonenhanced power Doppler US, whereas six showed marginal intratumoral flow signals at contrast agent-enhanced power Doppler US. These six tumors were found to have small enhancing foci, suggestive of viable tumor, in corresponding areas at immediate follow-up CT. Additional **RF** ablation or transcatheter arterial chemoembolization was performed in these tumors. CONCLUSION: The results of power Doppler US with a microbubble contrast agent in HCCs treated with **RF** ablation correlated well with those of contrast-enhanced CT. Preliminary data suggest that contrast-enhanced power Doppler US can be a promising noninvasive technique for assessing therapeutic response.

DESCRIPTORS:
MAJOR CONCEPTS: Gastroenterology--Human Medicine, Medical Sciences; Oncology--Human Medicine, Medical Sciences; Radiology--Medical Sciences ; Methods and Techniques
BIOSYSTEMATIC NAMES: Hominidae--Primates, Mammalia, Vertebrata, Chordata, Animalia
ORGANISMS: human (Hominidae)--patient
COMMON TAXONOMIC TERMS: Animals; Chordates; Humans; Mammals; Primates; Vertebrates
DISEASES: hepatocellular carcinoma--digestive system disease, neoplastic disease
MESH TERMS: Carcinoma, Hepatocellular (MeSH); Liver Neoplasms (MeSH)
CHEMICALS & BIOCHEMICALS: microbubble contrast agent--imaging agent
METHODS & EQUIPMENT: percutaneous radio-frequency ablation--therapeutic method; power Doppler ultrasonography--imaging method
CONCEPT CODES:
14006 Digestive system - Pathology
06504 Radiation biology - Radiation and isotope techniques
12512 Pathology - Therapy
24004 Neoplasms - Pathology, clinical aspects and systemic effects
24008 Neoplasms - Therapeutic agents and therapy
BIOSYSTEMATIC CODES:
86215 Hominidae

42/5/6 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0012600356 BIOSIS NO.: 200000318669
Quantification of mitral regurgitation in the cardiac catheterization

laboratory with contrast echocardiography
AUTHOR: Buckley Ralph S; Kaul Sanjiv (Reprint); Jayaweera Ananda R; Gimple Lawrence W; Powers Eric R; Dent John M
AUTHOR ADDRESS: Cardiovascular Division, University of Virginia Medical Center, Charlottesville, VA, 22908, USA**USA
JOURNAL: American Heart Journal 139 (6): p1109-1113 June, 2000 2000
MEDIUM: print
ISSN: 0002-8703
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: Background There is no method of quantifying the severity of mitral regurgitation (MR) from injection of tracer directly into the left ventricular (LV) cavity, a method commonly used in the cardiac catheterization laboratory. Methods and Results We used a previously validated mathematical model that derives regurgitant fraction (RF) from the relative tracer washout from the left atrial (LA) and LV cavities. Thirty-nine patients referred for diagnostic cardiac catheterization with clinical evidence of possible MR were included in the study. Five milliliters of a **microbubble** mixture was power- **injected** into the LV during simultaneously performed contrast echocardiography. Relative changes in background-subtracted video intensity were measured from the LV and LA, and the resultant model-derived **RF** was correlated with the severity of MR on cineangiography. The severity of MR ranged from 0 to 4+ on cineangiography with corresponding model-derived **RF** of 0 to 0.69 on contrast echocardiography. A close linear relation was noted between angiographic severity of MR and model-derived **RF** on contrast echocardiography ($y = 0.1x + 0.03$, $r = 0.89$, $P < .001$). Contrast echocardiography was more sensitive than cineangiography for detecting mild MR. Conclusions We describe a new method of measuring the severity of MR in the cardiac catheterization laboratory. Apart from being quantitative, this method can be safety used during cardiac catheterization in patients in whom iodinated contrast agents may be potentially harmful.

DESCRIPTORS:
MAJOR CONCEPTS: Cardiovascular Medicine--Human Medicine, Medical Sciences ; Radiology--Medical Sciences
BIOSYSTEMATIC NAMES: Hominidae--Primates, Mammalia, Vertebrata, Chordata, Animalia
ORGANISMS: human (Hominidae)--patient
COMMON TAXONOMIC TERMS: Animals; Chordates; Humans; Mammals; Primates; Vertebrates
DISEASES: mitral regurgitation--heart disease, quantification
MESH TERMS: Mitral Valve Insufficiency (MeSH)
CHEMICALS & BIOCHEMICALS: microbubbles--echocardiographic contrast agent
METHODS & EQUIPMENT: contract echocardiography--imaging method, measurement method, safety; regurgitant fraction quantification model --mathematical model
CONCEPT CODES:
06504 Radiation biology - Radiation and isotope techniques
12504 Pathology - Diagnostic
14506 Cardiovascular system - Heart pathology
BIOSYSTEMATIC CODES:
86215 Hominidae

42/5/9 (Item 5 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0011391514 BIOSIS NO.: 199800185761

The use of lipid-coated microbubbles as a delivery agent of 7beta-hydroxycholesterol in a radiofrequency lesion in the rat brain

AUTHOR: Wakefield Andrew E (Reprint); Ho Shih-Yieh; Li Xin-Gang; D'Arrigo Joseph S; Simon Richard H
AUTHOR ADDRESS: Hartford Hosp., Dep. Neurosurgery, 85 Jefferson St., Suite 607, P.O. Box 5037, Hartford, CT 06102-5037, USA**USA

JOURNAL: Neurosurgery (Baltimore) 42 (3): p592-598 March, 1998 1998
MEDIUM: print
ISSN: 0148-396X
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: OBJECTIVE: This laboratory has previously described the aggregation of intravenously administered lipid-coated microbubbles (LCM) around tumors and areas of injury. 7beta-Hydroxycholesterol has been used to inhibit astrocytic proliferation in nervous system injury models. The compound has been given by direct infusion, by epidural catheter, or in liposomes (delivered stereotactically to the injury site). In this article, we report the use of LCM to deliver 7beta-hydroxycholesterol to a **radiofrequency** injury site in the rat cerebrum. METHODS: First, the ability of LCM to target the thermal lesion in the rat brain was characterized using a lipid-soluble fluorescent dye 3,3-dioctadecyloxacarbocyanine perchlorate. Then, the effectiveness of this delivery system in suppression of glial proliferation was measured by glial fibrillary acidic protein immunoreactivity. RESULTS: Glial fibrillary acidic protein immunoreactivity was significantly reduced when 7beta-hydroxycholesterol was administered via LCM but not alone, suggesting that astrocytic proliferation would correspondingly be diminished. CONCLUSION: LCM were assessed as a delivery vehicle for 7beta-hydroxycholesterol in a rat brain **radiofrequency** lesion and found to be efficient in reducing astrogliosis, as measured by glial fibrillary acidic protein immunoreactivity.

DESCRIPTORS:
MAJOR CONCEPTS: Nervous System--Neural Coordination; Pharmacology; Radiation Biology
BIOSYSTEMATIC NAMES: Muridae--Rodentia, Mammalia, Vertebrata, Chordata, Animalia
ORGANISMS: rat (Muridae)--Sprague-Dawley
ORGANISMS: PARTS ETC: astrocyte--nervous system, proliferation
COMMON TAXONOMIC TERMS: Animals; Chordates; Mammals; Nonhuman Vertebrates ; Nonhuman Mammals; Rodents; Vertebrates
CHEMICALS & BIOCHEMICALS: glial fibrillary acidic protein; 7beta-hydroxycholesterol--autonomic-drug, proliferation inhibitor
METHODS & EQUIPMENT: lipid-coated microbubbles--drug delivery method; radiofrequency injury site targeting--pharmacological method, therapeutic method
CONCEPT CODES:
22024 Pharmacology - Neuropharmacology
02506 Cytology - Animal
06504 Radiation biology - Radiation and isotope techniques
20501 Nervous system - General and methods
20506 Nervous system - Pathology
22100 Routes of immunization, infection and therapy
25508 Development and Embryology - Morphogenesis
BIOSYSTEMATIC CODES:
86375 Muridae

42/5/10 (Item 6 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0011076256 BIOSIS NO.: 199799710316
The affinity of lipid-coated microbubbles for maturing brain injury sites
AUTHOR: Ho Shih-Yieh; Li Xin-Gang; Wakefield Andrew; Barbarese Elisa; D'Arrigo Joseph S; Simon Richard H
AUTHOR ADDRESS: Univ. Connecticut Health Cent., Dep. Surgery, Div. Neurosurgery, Farmington, CT 06030-3511, USA**USA
JOURNAL: Brain Research Bulletin 43 (6): p543-549 1997 1997
ISSN: 0361-9230
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: The availability of a vehicle to deliver lipid soluble agents to a brain injury site may be of potential value in management of brain injury. This work describes the aggregation of intravenously administered Lipid-Coated Microbubbles (LCM) in the injury site following an experimental **radiofrequency** rat brain lesion. The bubbles can be identified around the region of the injury after the lesion has matured at least 48 h. The greatest bubbles density is evident after the lesion has matured for 10 days. This bubble density, reflecting "affinity," decreases to a plateau level from the second to the third week after injury. In order to investigate the potential relationship of bubble influx to posttraumatic astrocytosis and to cell turnover in the region, we utilized dual-channel laser-scanning confocal microscopy to track both bubble influx into the region and concomitant Glial Fibrillary Acidic Protein (GFAP) expressing astroctyte cell distribution. Cell turnover was assayed in separate sections using immunohistochemical staining of Proliferating Cell Nuclear Antigen (PCNA). We suggest a relationship between the LCM affinity and reactive astrocytes, but found no affinity of LCM for cells which stained positive with PCNA.

DESCRIPTORS:
MAJOR CONCEPTS: Biochemistry and Molecular Biophysics; Cardiovascular System--Transport and Circulation; Cell Biology; Development; Immune System--Chemical Coordination and Homeostasis; Metabolism; Methods and Techniques; Morphology; Nervous System--Neural Coordination; Pharmacology; Radiation Biology; Radiology--Medical Sciences
BIOSYSTEMATIC NAMES: Muridae--Rodentia, Mammalia, Vertebrata, Chordata, Animalia
ORGANISMS: rat (Muridae)
COMMON TAXONOMIC TERMS: Animals; Chordates; Mammals; Nonhuman Vertebrates ; Nonhuman Mammals; Rodents; Vertebrates
MISCELLANEOUS TERMS: ANALYTICAL METHOD; ASTROCYTES; BRAIN; BRAIN INJURY ; DRUG ADMINISTRATION METHOD; DRUG DELIVERY METHOD; DUAL-CHANNEL LASER-SCANNING CONFOCAL MICROSCOPY; GLIAL FIBRILLARY ACIDIC PROTEIN; INJURY; INTRAVENOUS LIPID-COATED MICROBUBBLE ADMINISTRATION; LIPID SOLUBLE AGENTS; LIPID-COATED MICROBUBBLE AFFINITY; MATURING BRAIN INJURY SITES; MICROSCOPY METHOD; NERVOUS SYSTEM; NERVOUS SYSTEM DISEASE ; PHARMACOLOGICAL METHOD; PHARMACOLOGY; PROLIFERATING CELL NUCLEAR ANTIGEN; RADIOFREQUENCY BRAIN LESION; RADIOLOGIC METHOD
CONCEPT CODES:
02506 Cytology - Animal
06504 Radiation biology - Radiation and isotope techniques
06506 Radiation biology - Radiation effects and protective measures
10064 Biochemistry studies - Proteins, peptides and amino acids

10066 Biochemistry studies - Lipids
10504 Biophysics - Methods and techniques
10612 External effects - Physical and mechanical effect
11108 Anatomy and Histology - Microscopic and ultramicroscopic anatomy
13012 Metabolism - Proteins, peptides and amino acids
14501 Cardiovascular system - General and methods
20502 Nervous system - Anatomy
20504 Nervous system - Physiology and biochemistry
20506 Nervous system - Pathology
22003 Pharmacology - Drug metabolism and metabolic stimulators
22018 Pharmacology - Immunological processes and allergy
22024 Pharmacology - Neuropharmacology
22100 Routes of immunization, infection and therapy
25508 Development and Embryology - Morphogenesis
34508 Immunology - Immunopathology, tissue immunology
BIOSYSTEMATIC CODES:
86375 Muridae

42/5/13 (Item 9 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0009334568 BIOSIS NO.: 199497355853
Effects of radiofrequency catheter ablation on regional myocardial blood flow: Possible mechanism for late electrophysiological outcome
AUTHOR: Nath Sunil; Whayne James G; Kaul Sanjiv; Goodman N Craig; Jayaweera Ananda R; Haines David E (Reprint)
AUTHOR ADDRESS: Cardiovascular Div., Box 158, Univ. Virginia Health Sci. Cent., Charlottesville, VA 22908, USA**USA
JOURNAL: Circulation 89 (6): p2667-2672 1994 1994
ISSN: 0009-7322
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: Background: We postulated that the late electrophysiological effects of radiofrequency (RF) ablation may be related to microvascular injury extending beyond the region of acute coagulation necrosis. Methods and Results: Eighteen RF lesions created in the left anterior descending coronary artery (LAD) perfusion bed of seven open chest anesthetized dogs were studied. The ablation electrode and surrounding myocardium were imaged using high-resolution two-dimensional echocardiography at times 4 magnification. After 60 seconds of RF delivery, sonicated albumin **microbubbles** (mean size, 4.3 mu-m) were **injected** into the LAD to measure regional myocardial perfusion, and time-intensity plots were generated from simultaneously acquired two-dimensional echocardiography images. The regions with persistent contrast effect on two-dimensional echocardiography were larger than the pathological lesions (mean cross-sectional area, 48.3 +- 6.3 versus 19.3 +- 4.7 mm-2, respectively; P lt .0001). The mean contrast transit rate in the area corresponding to the pathological lesion was 25 +- 12% of that in the normal myocardium, but it was also reduced beyond the lesion, being 48 +- 27% and 82 +- 28% of normal, respectively, in the 3-mm and 3- to 6-mm circumferential rims surrounding the pathological lesion (P lt .05). Electron microscopy performed in two additional dogs with similar lesions demonstrated the presence of ultrastructural damage to the microvascular endothelium well beyond the pathological lesion edge. Conclusions: **RF** catheter ablation not only results in a marked reduction in blood flow within the acute pathological lesion but also causes reduced flow beyond the borders of the acute lesion because of microvascular endothelial cell injury. The

progression or resolution of tissue injury within the region beyond the border of the pathological lesion may explain the late electrophysiological effects of **RF** ablation.

DESCRIPTORS:
MAJOR CONCEPTS: Blood and Lymphatics--Transport and Circulation; Cardiovascular Medicine--Human Medicine, Medical Sciences; Cardiovascular System--Transport and Circulation; Muscular System--Movement and Support; Radiation Biology
BIOSYSTEMATIC NAMES: Hominidae--Primates, Mammalia, Vertebrata, Chordata, Animalia
ORGANISMS: human (Hominidae)
COMMON TAXONOMIC TERMS: Animals; Chordates; Humans; Mammals; Primates; Vertebrates
MISCELLANEOUS TERMS: ACUTE COAGULATION NECROSIS; MICROVASCULATURE; THERAPEUTIC METHOD
CONCEPT CODES:
06506 Radiation biology - Radiation effects and protective measures
12512 Pathology - Therapy
14504 Cardiovascular system - Physiology and biochemistry
14508 Cardiovascular system - Blood vessel pathology
15002 Blood - Blood and lymph studies
17504 Muscle - Physiology and biochemistry
BIOSYSTEMATIC CODES:
86215 Hominidae

42/5/15 (Item 11 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0007692559 BIOSIS NO.: 199191075450
EXPERIMENTAL STUDY OF FERROMAGNETIC INDUCTION HEATING COMBINED WITH HEPATIC ARTERIAL EMBOLIZATION FOR TREATMENT OF LIVER TUMORS
AUTHOR: HASE M (Reprint); SAKO M; HIROTA S
AUTHOR ADDRESS: DEP RADIOL, KOBE UNIV SCH MED, JAPAN**JAPAN
JOURNAL: Nippon Acta Radiologica 50 (11): p1402-1414 1990
ISSN: 0048-0428
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: JAPANESE

ABSTRACT: The induction heating to ferromagnetic implants (Ferromagnetic Induction Heating: FIH) has been developed for the purposes of selective hyperthermia on deep-seated tumors. In this investigation, the procedure of FIH combined with hepatic arterial embolization (HAE) was experimentally studied on VX2 liver tumor of rabbit. The induction heating unit is composed of radiofrequency generator (500 KHZ, 6-12 KW) and circular applicator (60 cm in diameter). Ferromagnetic implant used was pure iron particles (100 .mu. in size), which were suspended in tenacious polysaccharide solution to be **injectable** through a **needle** . After HAE with **gelatin** sponge powder had been made, iron particle suspension was **injection** into the cavity of tumor with subsequent exertion of induction heating (9KW) for 15 minutes. The measurement of temperature was made on the tumor and the liver parenchyma by fluoroptic thermometer with thin, flexible probe which readily passed through a needle. The temperature measured at peripheral area of tumor elevated at range from 2.5 to 7.1.degree.C, corresponding to the dose of iron particles injected; 2.5.degree.C with 1 g, 4.9.degree.C with 2 g, 7.1.degree.C with 3 g. In contrast, the temperature of liver parenchyma elevated at range of less than 2.5.degree.C, to indicate a successful

selective heating of liver tumor. An additional experiment for the effect of heat on normal liver of rabbit were made using a microwave heating system. The histological and serologic examinations after heating of below 40.degree.C did not show any abnormal findings. After heating of 42 .apprx. 43.degree.C, however, serum GOT and GPT transiently elevated more than 3 times to that of before heating. Histologically, there were extensive degeneration and necrosis of liver tissue. From the results we concluded that FIH combined with HAE could provide an intensive therapeutic effect for treatment of well-localized liver tumors with minimal damages to the liver parenchyma, because of selective heating of the tumor.

REGISTRY NUMBERS: 9000-97-9: GLUTAMIC OXALACETIC TRANSAMINASE; 9000-86-6: GLUTAMIC PYRUVIC TRANSAMINASE
DESCRIPTORS: RABBIT GLUTAMIC OXALACETIC TRANSAMINASE GLUTAMIC PYRUVIC TRANSAMINASE DEGENERATION NECROSIS SELECTIVE HYPERTHERMIA
DESCRIPTORS:
MAJOR CONCEPTS: Cardiovascular System--Transport and Circulation; Digestive System--Ingestion and Assimilation; Pathology; Physiology; Tumor Biology
BIOSYSTEMATIC NAMES: Leporidae--Lagomorpha, Mammalia, Vertebrata, Chordata, Animalia
COMMON TAXONOMIC TERMS: Animals; Chordates; Lagomorphs; Mammals; Nonhuman Vertebrates; Nonhuman Mammals; Vertebrates
CHEMICALS & BIOCHEMICALS: GLUTAMIC OXALACETIC TRANSAMINASE; GLUTAMIC PYRUVIC TRANSAMINASE
CONCEPT CODES:
10069 Biochemistry studies - Minerals
10610 External effects - Electric, magnetic and gravitational phenomena
10618 External effects - Temperature as a primary variable - hot
12510 Pathology - Necrosis
12512 Pathology - Therapy
14006 Digestive system - Pathology
14508 Cardiovascular system - Blood vessel pathology
23001 Temperature - General measurement and methods
23005 Temperature - Thermotherapy
23006 Temperature - Hypothermia and hyperthermia
24008 Neoplasms - Therapeutic agents and therapy
BIOSYSTEMATIC CODES:
86040 Leporidae

42/5/16 (Item 12 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0006059641 BIOSIS NO.: 198885028532
MALIGNANT LYMPHOMA FROM LEFT RENAL CAPSULE REPORT OF CASE
AUTHOR: NITTA M (Reprint); NAKAJIMA K; TOKUNAGA S; NAITO K; HISAZUMI H; TATSUMI S; NAKABAYASHI H; TAKEDA R; ET AL
AUTHOR ADDRESS: DEP UROL, SCH MED, KANAZAWA UNIV**JAPAN
JOURNAL: Acta Urologica Japonica 33 (8): p1213-1217 1987
ISSN: 0018-1994
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: JAPANESE

ABSTRACT: A 59-year-old woman was admitted to our clinic with the complaint of left flank pain. Excretory urogram showed left hydronephrosis. Computed tomographic (CT) scan and renal angiography showed a left renal capsular tumor. Histological specimen obtained by a sure cut needle

suggested malignant lymphoma. She was treated with a combined treatment of 8 MHz **radiofrequency** hyperthermia in a total of 10 sessions and 5,440 rads irradiation for 5 weeks. After the treatment, CT scan showed 92% tumor regression. After that, a recurrent tumor in left shoulder muscle became manifest. She received combination chemotherapy with 3 courses of ABEP regimen (aclacinomycin, cytosine arabinoside, etoposide, prednisolone) and 7 courses of ACOPE regimen (adriamycin, cyclophosphamide, vincristine, prednisolone, etoposide) and complete remission was obtained.

REGISTRY NUMBERS: 66676-88-8: ACLACINOMYCIN; 147-94-4: CYTOSINE ARABINOSIDE ; 33419-42-0: ETOPOSIDE; 50-24-8: PREDNISOLONE; 25316-40-9: ADRIAMYCIN; 50-18-0: CYCLOPHOSPHAMIDE; 57-22-7: VINCRISTINE
DESCRIPTORS: HUMAN ACLACINOMYCIN CYTOSINE ARABINOSIDE ETOPOSIDE PREDNISOLONE ADRIAMYCIN CYCLOPHOSPHAMIDE VINCRISTINE PHARMACOLOGICAL TOOL RADIOGRAPHY
DESCRIPTORS:
MAJOR CONCEPTS: Blood and Lymphatics--Transport and Circulation; Hematology--Human Medicine, Medical Sciences; Morphology; Oncology--Human Medicine, Medical Sciences; Pharmacology; Urology--Human Medicine, Medical Sciences
BIOSYSTEMATIC NAMES: Hominidae--Primates, Mammalia, Vertebrata, Chordata, Animalia
COMMON TAXONOMIC TERMS: Animals; Chordates; Humans; Mammals; Primates; Vertebrates
CHEMICALS & BIOCHEMICALS: ACLACINOMYCIN; CYTOSINE ARABINOSIDE; ETOPOSIDE; PREDNISOLONE; ADRIAMYCIN; CYCLOPHOSPHAMIDE; VINCRISTINE
CONCEPT CODES:
01012 Methods - Photography
06504 Radiation biology - Radiation and isotope techniques
11106 Anatomy and Histology - Radiologic anatomy
15006 Blood - Blood, lymphatic and reticuloendothelial pathologies
15008 Blood - Lymphatic tissue and reticuloendothelial system
15501 Urinary system - General and methods
15506 Urinary system - Pathology
22002 Pharmacology - General
22005 Pharmacology - Clinical pharmacology
24001 Neoplasms - Diagnostic methods
24004 Neoplasms - Pathology, clinical aspects and systemic effects
24008 Neoplasms - Therapeutic agents and therapy
24010 Neoplasms - Blood and reticuloendothelial neoplasms
BIOSYSTEMATIC CODES:
86215 Hominidae

42/5/17 (Item 13 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0006058371 BIOSIS NO.: 198885027262
SEX-DEPENDENT DIFFERENCES IN THE IGE RESPONSE MODULATED BY PHYTOHEMAGGLUTININ
AUTHOR: ASTROQUIZA M I (Reprint); CISTERNAS C; LEAL X
AUTHOR ADDRESS: INST EXPERIMENTAL MED, UNIV AUSTRAL DE CHILE, VALDIVIA, CHILE**CHILE
JOURNAL: Immunology Letters 16 (1): p27-30 1987
ISSN: 0165-2478
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

ABSTRACT: Modulation of the IgE response by PHA treatment in relation to animal sex was analysed. Male and female RF mice were immunized with ovalbumin in aluminum hydroxide **gel** and PHA was **injected** 1 or 2 days before immunization. Castrated mice were also immunized and received PHA on day -2. The results show that the IgE response is lower in the male than in the female group. An opposite class specific modulation depending on the timing of the PHA inoculaiton is observed between males and females. This effect is not observed in castrated mice. IgM and/or IgG production is neither modified by sex nor by the mitogen treatment.

DESCRIPTORS: IMMUNOGLOBULIN E CASTRATION
DESCRIPTORS:
MAJOR CONCEPTS: Immune System--Chemical Coordination and Homeostasis; Metabolism; Reproductive System--Reproduction
BIOSYSTEMATIC NAMES: Muridae--Rodentia, Mammalia, Vertebrata, Chordata, Animalia
COMMON TAXONOMIC TERMS: Animals; Chordates; Mammals; Nonhuman Vertebrates ; Nonhuman Mammals; Rodents; Vertebrates
CONCEPT CODES:
03510 Genetics - Sex differences
10064 Biochemistry studies - Proteins, peptides and amino acids
10068 Biochemistry studies - Carbohydrates
13004 Metabolism - Carbohydrates
13012 Metabolism - Proteins, peptides and amino acids
16501 Reproductive system - General and methods
16504 Reproductive system - Physiology and biochemistry
34508 Immunology - Immunopathology, tissue immunology
BIOSYSTEMATIC CODES:
86375 Muridae

42/5/19 (Item 15 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0005630955 BIOSIS NO.: 198783109846
REGIONAL HYPERTHERMIA COMBINED WITH BLOCKADE OF THE HEPATIC ARTERIAL BLOOD FLOW BY DEGRADABLE STARCH MICROSPHERES IN PIGS
AUTHOR: AKUTA K (Reprint); HIRAOKA M; JO S; MA F; NISHIMURA Y; TAKAHASHI M; ABE M; MALMQVIST M; LINDBOM L-O; LINDBLOM R
AUTHOR ADDRESS: DEP RADIOLOGY, FAC MED, KYOTO UNIV, SAKYO-KU, KYOTO 606, JPN**JAPAN
JOURNAL: International Journal of Radiation Oncology, Biology, Physics 13 (2): p239-242 1987
ISSN: 0360-3016
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

ABSTRACT: The benefit of hepatic arterial microembolization by degradable starch microspheres (DSM) was investigated in regional hyperthermia of the liver. Hyperthermia with and without blood flow blockade of the hepatic artery using degradable starch microspheres was performed on six pigs. Heat was given for 30 min in each treatment by 8 MHz radiofrequency capacitive heating equipment. To maintain blood flow blockade during hyperthermia, 10 mg/kg of degradable starch **microspheres** was **administered** into the hepatic artery as an initial dose and 5 mg/kg of the drug was added periodically under the measurement of hepatic arterial blood flow by an electromagnetic flowmeter. To evaluate the effect of degradable starch microspheres, the temperature increase in the liver and rectum was compared between the treatment with and without DSM. All pigs

showed a larger increase in intrahepatic temperature when heated in combination with degradable starch microspheres than without. On the other hand, temperature increase in the rectum as a result of hyperthermia to the liver was suppressed by DSM as compared with hyperthermia alone. These results indicate that hepatic arterial embolization by degradable starch microspheres potentiates **radiofrequency** capacitive heating of the liver. Although this study was not made with liver tumors, regional hyperthermia may be effective in the control of liver tumors when heat is given after the blockade of the hepatic artery by DSM.

REGISTRY NUMBERS: 9005-25-8: STARCH
DESCRIPTORS: HEPATIC ARTERIAL MICROEMBOLISM HEPATIC TUMOR TREATMENT ANIMAL MODEL
DESCRIPTORS:
MAJOR CONCEPTS: Cardiovascular System--Transport and Circulation; Digestive System--Ingestion and Assimilation; Pathology; Physiology; Radiation Biology; Tumor Biology
BIOSYSTEMATIC NAMES: Suidae--Artiodactyla, Mammalia, Vertebrata, Chordata, Animalia
COMMON TAXONOMIC TERMS: Animals; Artiodactyls; Chordates; Mammals; Nonhuman Vertebrates; Nonhuman Mammals; Vertebrates
CHEMICALS & BIOCHEMICALS: STARCH
CONCEPT CODES:
06506 Radiation biology - Radiation effects and protective measures
10618 External effects - Temperature as a primary variable - hot
12512 Pathology - Therapy
14001 Digestive system - General and methods
14501 Cardiovascular system - General and methods
23005 Temperature - Thermotherapy
23006 Temperature - Hypothermia and hyperthermia
24008 Neoplasms - Therapeutic agents and therapy
28002 Laboratory animals - General
BIOSYSTEMATIC CODES:
85740 Suidae

42/5/22 (Item 18 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0003835974 BIOSIS NO.: 198375019917
EFFECTS OF PARTIALLY THIOLATED POLY CYTIDYLIC-ACID AND LIPOSOMES ON IN-VITRO COLONY FORMING CELLS OF LEUKEMIC MICE
AUTHOR: HO Y-K (Reprint); MAYHEW E; PREISLER H D; BARDOS T J
AUTHOR ADDRESS: DEP BIOPHYS SCI, STATE UNIV NY, BUFFALO, NY 14214, USA**USA
JOURNAL: Cancer Research 42 (5): p1740-1743 1982
ISSN: 0008-5472
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

ABSTRACT: Partially thiolated polycytidylic acid (MPC), an antileukemic agent, when administered to leukemic RF/UN mice inhibited the clonogenicity of bone marrow progenitor cells in a time- and dose-dependent manner. The effect of a single dose of MPC disappeared within 40 h due to the rapid degradation of this compound in mice. When MPC was **encapsulated** in liposomes before **injection** , its activity at 19 h after inoculation was similar to that of free MPC. The inhibitory effect of this liposome-MPC complex, persisted for at least 40 h, indicating that the MPC was protected from hydrolysis by the nucleases

present in blood. Drug-free liposomes increased the number of clonogenic progenitor cells; a mixture of plain liposomes and MPC decreased the number of clonogenic cells to a greater extent than did MPC alone or MPC within liposomes. The liposomes per se may have altered the clearance function of the RES and competed with MPC for uptake by the RES cells, thereby resulting in increased plasma levels of MPC which in turn resulted in greater killing of the target cells.

REGISTRY NUMBERS: 30811-80-4: POLYCYTIDYLIC-ACID; 9026-81-7D: NUCLEASES
DESCRIPTORS: BONE MARROW PROGENITOR CELLS RES ANTINEOPLASTIC-DRUG HEMATOLOGIC-DRUG NUCLEASES
DESCRIPTORS:
MAJOR CONCEPTS: Blood and Lymphatics--Transport and Circulation; Cell Biology; Metabolism; Pharmacology; Tumor Biology
BIOSYSTEMATIC NAMES: Muridae--Rodentia, Mammalia, Vertebrata, Chordata, Animalia
COMMON TAXONOMIC TERMS: Animals; Chordates; Mammals; Nonhuman Vertebrates ; Nonhuman Mammals; Rodents; Vertebrates
CHEMICALS & BIOCHEMICALS: POLYCYTIDYLIC-ACID; NUCLEASES
CONCEPT CODES:
02506 Cytology - Animal
10010 Comparative biochemistry
10062 Biochemistry studies - Nucleic acids, purines and pyrimidines
10064 Biochemistry studies - Proteins, peptides and amino acids
10808 Enzymes - Physiological studies
12510 Pathology - Necrosis
12512 Pathology - Therapy
13014 Metabolism - Nucleic acids, purines and pyrimidines
15002 Blood - Blood and lymph studies
15004 Blood - Blood cell studies
15006 Blood - Blood, lymphatic and reticuloendothelial pathologies
15008 Blood - Lymphatic tissue and reticuloendothelial system
18001 Bones, joints, fasciae, connective and adipose tissue - General and methods
22003 Pharmacology - Drug metabolism and metabolic stimulators
22008 Pharmacology - Blood and hematopoietic agents
22100 Routes of immunization, infection and therapy
24008 Neoplasms - Therapeutic agents and therapy
32500 Tissue culture, apparatus, methods and media
38502 Chemotherapy - General, methods and metabolism
BIOSYSTEMATIC CODES:
86375 Muridae

42/5/27 (Item 1 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

08928525 Genuine Article#: 345EJ Number of References: 53
Title: Global approach to hepatic metastases from colorectal cancer: indication and outcome of intra-arterial chemotherapy and other hepatic-directed treatments
Author(s): Fiorentini G (REPRINT) ; Poddie DB; DeGiorgi U; Guglielminetti D ; Giovanis P; Leoni M; Latino W; Dazzi C; Cariello A; Turci D; Marangolo M
Corporate Source: CITY HOSP ASL RAVENNA,DEPT HEMATOL & ONCOL, VIALE RANDI 5/I-48100 RAVENNA//ITALY/ (REPRINT)
Journal: MEDICAL ONCOLOGY, 2000, V17, N3 (AUG), P163-173
ISSN: 1357-0560 Publication date: 20000800
Publisher: NATURE PUBLISHING GROUP, HOUNDMILLS, BASINGSTOKE RG21 6XS, HAMPSHIRE, ENGLAND

Language: English Document Type: REVIEW
Geographic Location: ITALY
Subfile: CC CLIN--Current Contents, Clinical Medicine
Journal Subject Category: ONCOLOGY
Abstract: Liver metastases of colorectal cancer is present in more than 20% of new diagnosed patients and in 40-60% of relapsed patients. It is a life-threatening prognostic aspect. Hepatic resection, when possible, is the best therapeutic modality, although the overall survival rate is still low (30%). Angiography and intraoperative ultrasonography are useful for resection. The number of hepatic metastases and the surgical margin are probably the most significant prognostic factors. Colorectal cancer may spread predominantly to the liver making regional treatment strategies viable options. Subtotal hepatic resections and segmentectomies are potentially curable procedures for single or small numbers of hepatic metastases without other sites of disease. However, there have been no prospective randomized trials comparing patients with unresected liver metastases and resected metastases. Regional chemotherapy with floxuridine seems usefull combined with hepatic resection eras palliative therapy. Gastric ulcer and biliary sclerosis are the main related toxicities. Patients with localized, unresectable hepatic metastases or concomitant bad medical condition may be candidates for radiation, percutaneous ethanol injection, cryosurgery, percutaneous radiofrequency, hypoxic flow-stop perfusions with bioreductive alkylating agents, hepatic arterial ligation, embolization and chemoembolization. These new hepatic-directed modalities of treatment are being investigated and may offer new approaches to providing palliation and prolonging survival. This review will report the possibilities of intra-arterial chemotherapy and other novel hepatic-directed approaches to the treatment of liver metastases from colorectal cancer.
Descriptors--Author Keywords: liver metastases from colorectal cancer ; intra-arterial chemotherapy ; ethanol injection ; cryosurgery ; chemoembolization ; radiofrequency ; hypoxic flow stop perfusion
Identifiers--KeyWord Plus(R): **RADIOFREQUENCY** TISSUE ABLATION; UNRESECTABLE LIVER METASTASES; RANDOMIZED TRIAL; STARCH **MICROSPHERES** ; NATURAL-HISTORY; FOLLOW-UP; CARCINOMA; FLOXURIDINE; **INFUSION;** IRRADIATION
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42/5/33 (Item 7 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

02404948 Genuine Article#: KZ159 Number of References: 23
Title: A FEASIBILITY STUDY ON QUANTITATING MYOCARDIAL PERFUSION WITH ALBUNEX(R), AN ULTRASONIC CONTRAST AGENT
Author(s): WILSON B; SHUNG KK; HETE B; LEVENE H; BARNHART JL
Corporate Source: PENN STATE UNIV,BIOENGN PROGRAM,231 HALLOWELL BLDG/UNIV PK//PA/16802; PENN STATE UNIV,BIOENGN PROGRAM,231 HALLOWELL BLDG/UNIV PK//PA/16802; MOLEC BIOSYST INC/SAN DIEGO//CA/92121
Journal: ULTRASOUND IN MEDICINE AND BIOLOGY, 1993, V19, N3, P181-191
ISSN: 0301-5629
Language: ENGLISH Document Type: ARTICLE
Geographic Location: USA
Subfile: SciSearch; CC CLIN--Current Contents, Clinical Medicine
Journal Subject Category: RADIOLOGY & NUCLEAR MEDICINE; ACOUSTICS
Abstract: Quantitating regional myocardial perfusion has been the much sought-after but still elusive goal of many intensive investigations over the years. Videodensitometry of the variation of myocardial echogenicity in two-dimensional (2-D) echocardiograms as a function of time in conjunction with the injection of a bolus of an ultrasound contrast agent has been used clinically as a tool for a direct assessment of regional myocardial perfusion, despite that the precise relationship between tissue echogenicity observed on an image and the echoes detected by the ultrasonic probe is unknown. A study was undertaken to determine whether ultrasonic backscatter calculated from unprocessed **radio frequency** (**RF**) echoes returned from myocardium could be used to quantitate regional myocardium perfusion. A real-time

ultrasonic scanner has been modified and interfaced to a microcomputer to acquire **RF** data at a rate up to 10 frames per second. Preliminary experimental data were obtained from four open-chest dogs following intracoronary injection of a bolus of Albunex(R) and two dogs following intravenous injection with this modified scanner. On one hand, these results indicate that the integrated backscatter measured from the region of myocardium perfused by the coronary artery where Albunex(R) is injected and selected for monitoring initially increases, reaches a peak, and then decreases as the contrast agent is washed out and that the magnitude of the peak is approximately linearly proportional to the volume concentration of Albunex(R) **microspheres injected** , clearly demonstrating the feasibility of this approach for quantitating region myocardial perfusion. On the other hand, intravenous injections did not result in any appreciable change in myocardial backscatter in the left ventricle although a response could be observed in the left ventricular blood pool.

Descriptors--Author Keywords: ULTRASOUND ; ULTRASONIC SCATTERING ; INTEGRATED BACKSCATTER ; MYOCARDIAL PERFUSION ; ULTRASOUND CONTRAST AGENT ; ALBUNEX(R)

Identifiers--KeyWords Plus: BLOOD-FLOW; ECHOCARDIOGRAPHY; HEART

Research Fronts: 91-5384 001 (CONTRAST ECHOCARDIOGRAPHY; SONICATED ALBUMIN MICROSPHERES; HIGH-SPEED ULTRASOUND VOLUMETRIC IMAGING-SYSTEM)

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42/5/35 (Item 9 from file: 34)

02036866 Genuine Article#: JW293 Number of References: 15

Title: EFFECTS OF MULTIMODAL TREATMENT AND HYPERTHERMIA ON HEPATIC-TUMORS

Author(s): TANAKA Y; YAMAMOTO K; MURATA T; NAGATA K

Corporate Source: KANSAI MED UNIV,DEPT RADIOL,1 FUMIZONO CHO/MORIGUCHI/OSAKA 570/JAPAN/

Journal: CANCER CHEMOTHERAPY AND PHARMACOLOGY, 1992, V31, S (NOV), P S111-S114

ISSN: 0344-5704

Language: ENGLISH Document Type: ARTICLE

Geographic Location: JAPAN
Subfile: SciSearch; CC LIFE--Current Contents, Life Sciences; CC CLIN--Current Contents, Clinical Medicine
Journal Subject Category: PHARMACOLOGY & PHARMACY; ONCOLOGY
Abstract: The therapeutic results of Lp-TAE (transcatheter arterial embolization in the presence or absence of Gelfoam particles preceded by the infusion of a mixture of lipiodol and an anticancer drug via the proper hepatic artery) or DSM-TAE (transcatheter arterial embolization with degradable starch **microspheres** and the arterial **injection** of anticancer drugs via the hepatic artery) combined with hyperthermia were evaluated in 30 patients with hepatocellular carcinoma (HCC), 5 subjects with hepatic cholangiocarcinoma, and 22 patients with metastatic liver carcinoma. Hyperthermia was performed using an 8-MHz Thermotron **RF** -8. Tumor temperatures could be measured in 31 patients (54.4%) with malignant lesions of the liver who had undergone hyperthermia. The mean maximal temperature (T(max)) was 41.5-degrees-C in the metastatic liver cancers. The efficiency of heating in HCC was unfavorable, i.e., the mean T(max) was only 40.7-degrees-C. The rise in tumor temperature was greater in either HCC or metastatic liver carcinoma associated with portal invasion of the lesion. The tumor-temperature elevation was also excellent in HCC that had been subjected to embolization with DSM in combination with hyperthermia. The response rate (complete response plus partial response) was as high as 40% (4/10) in the group in which the tumor temperature could be raised to 42-degrees-C or more. Among the 52 patients who had shown a high pretreatment level of tumor marker, that value decreased in 34 cases (65.4%), and the decrease was greater than 50% in 22 cases (42.3%).
Descriptors--Author Keywords: HYPERTHERMIA ; HEPATIC TUMOR ; MULTIMODAL TREATMENT
Identifiers--KeyWords Plus: STARCH MICROSPHERES; ARTERY LIGATION; LIVER-TUMORS; BLOOD-FLOW; RATS; EMBOLIZATION; CHEMOTHERAPY
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42/5/45 (Item 2 from file: 94)
DIALOG(R)File 94:JICST-EPlus

00159471 JICST ACCESSION NUMBER: 85A0515347 FILE SEGMENT: JICST-E
Multimodality therapy for colorectal cancer.
FUJIMOTO SHIGERU (1); MIYAZAKI MASARU (1); OKUI KATSUJI (1)
(1) Chiba Univ., School of Medicine
Gan no Rinsho(Japanese Journal of Cancer Clinics), 1985, VOL.31,NO.9, PAGE.1106-1114, FIG.12, REF.31
JOURNAL NUMBER: Z0928AAA ISSN NO: 0021-4949

UNIVERSAL DECIMAL CLASSIFICATION: 615.277.3.03 616-006-089
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Journal
ARTICLE TYPE: Review article
MEDIA TYPE: Printed Publication
ABSTRACT: Multimodality therapy for colorectal cancer is composed of surgery, chemotherapy and irradiation; and hyperthermia joins them recently. As patients with operable colorectal cancer are a good candidate for a chemotherapeutic approach, we began postoperative adjuvant chemotherapy since 1971. On the other hand, our treatment policy towards inoperable cases is various treatments combined with the four therapies described above. The most patients with hepatic metastasis are unamenable for surgery, and they have been mainly treated with intra-arterial chemotherapy. With conventional infusion treatment, however, the infusion drugs are eliminated rapidly from the drainage vein. Thus, we prepared biodegradable albumin microspheres containing MMC (mean diameter 45.+-.8.MU.m); and in 6 patients with liver metastasis, we **infused** MMC **microspheres** into the proper hepatic artery, with marked tumor regression. Hyperthermia treatment has been performed with ThermaTech 2000 (International Institue for Medical Sciences, U.S.A.), which has a compete capacitive, 3-channel, "crossfire" heating system operating by **RF** at 13.56MHz. Six patients with local recurrence and/or hepatic metastasis were treated by hyperthermia combined with chemotherapy or irradition, with a fair success in tumor response and improvement of subjective symptoms. (author abst.)
DESCRIPTORS: human(primates); digestive system disease; large intestine; metabasis; operative surgery; drug therapy; antitumor drug; metastasis; intraarterial administration; side effect; pyrimidine nucleoside; organofluorine compound; physical therapy; combination therapy; survival ratio; recurrence; tumor; nitrogen heterocyclic compound; antiphlogistic; pyrimidine base; urea compound; hydroxy compound; antineoplastic antimetabolite; amine; alicyclic compound; nitrosamine; organochlorine compound; antineoplastic alkylating agent
BROADER DESCRIPTORS: disease; intestine; gastrointestinal duct; digestive organ; therapy; drug; tumor process; process; administration route; administration(biology); action and effect; nucleoside; glycoside; organohalogene compound; ratio; heterocyclic compound; nucleic acid base; vic-polynitrogen compound; nitroso compound
CLASSIFICATION CODE(S): GW16020L; GE03033T

42/5/46 (Item 1 from file: 144)
DIALOG(R)File 144:Pascal

14848389 PASCAL No.: 00-0533012
Hepatocellular carcinoma treated with percutaneous radio-frequency ablation : Usefulness of power Doppler US with a microbubble contrast agent in evaluating therapeutic response : Preliminary results
DONGIL CHOI; LIM Hyo K; SEUNG HOON KIM; WON JAE LEE; JANG Hyun-Jung; JI YEON LEE; SEUNG WOON PAIK; KWANG CHEOL KOH; JOON HYOEK LEE
Department of Radiology, Samsung Medical Center, Sungkyunkwan University School of Medicine, 50, 1lwon-Dong, Kang-nam-Ku, Seoul 135-710, Korea, Republic of; Department of Internal Medicine, Samsung Medical Center, Sungkyunkwan University School of Medicine, 50, 1lwon-Dong, Kang-nam-Ku, Seoul 135-710, Korea, Republic of
Journal: Radiology, 2000, 217 (2) 558-563
ISSN: 0033-8419 CODEN: RADLAX Availability: INIST-6163; 354000092629330370
No. of Refs.: 29 ref.

Document Type: P (Serial) ; A (Analytic)
Country of Publication: United States
Language: English

PURPOSE: To evaluate the usefuiness of power Doppter uitrasonography (US) with a microbubble contrast agent in assessing the therapeutic response of hepatocellular carcinomas (HCCs) treated with percutaneous radio-frequency (RF) ablation. MATERIALS AND METHODS: Forty patients with 45 nodular HCC lesions 1.0-3.8 cm in diameter underwent power Doppler US before and after intravenous **injection** of a **microbubble** contrast agent. The same procedures were repeated after US-guided percutaneous **RF** ablation. The results of these studies were compared with those of three-phase helical computed tomography (CT) performed immediately after **RF** ablation. RESULTS: Before **RF** ablation, nonenhanced power Doppler US demonstrated flow signals within tumor in 33 of 45 HCCs. After contrast agent administration, flow signals increased or newly appeared in all cases. After **RF** ablation, none of the ablated tumors showed intratumoral flow signals at nonenhanced power Doppler US, whereas six showed marginal intratumoral flow signais at contrast agent-enhanced power Doppier US. These six tumors were found to have small enhancing foci, suggestive of viable tumor, in corresponding areas at immediate follow-up CT. Additional **RF** ablation or transcatheter arterial chemoembolization was performed in these tumors. CONCLUSION: The results of power Doppler US with a microbubbie contrast agent in HCCs treated with **RF** ablation correlated well with those of contrast-enhanced CT. Preliminary data suggest that contrast-enhanced power Doppler US can be a promising noninvasive technique for assessing therapeutic response.

English Descriptors: Hepatocellular carcinoma; Ablation; Radiofrequency; Percutaneous route; Duplex ultrasonography; Guidance; Treatment efficiency; Evaluation; Human; Prospective

Broad Descriptors: Digestive diseases; Hepatic disease; Malignant tumor; Sonography; Medical imagery; Contrast media; Appareil digestif pathologie ; Foie pathologie; Tumeur maligne; Exploration ultrason; Imagerie medicale; Produit contraste; Aparato digestivo patologia; Higado patologia; Tumor maligno; Exploracion ultrasonido; Imageneria medical; Medio contraste

French Descriptors: Carcinome hepatocellulaire; Ablation; Radiofrequence; Voie percutanee; Echodopplerometrie; Guidage; Efficacite traitement; Evaluation; Homme; Prospective; Microbulle

Classification Codes: 002B13C01

42/5/47 (Item 2 from file: 144)
DIALOG(R)File 144:Pascal

13507985 PASCAL No.: 98-0206408
The use of lipid-coated microbubbles as a delivery agent of 7 beta -hydroxycholesterol in a radiofrequency lesion in the rat brain. Commentary
WAKEFIELD A E; HO S Y; LI X G; D'ARRIGO J S; SIMON R H; HODGE C J JR comment; ZLOKOVIC B comment
Department of Surgery, Division of Neurosurgery, University of Connecticut Health Center, Farmington, Connecticut, United States; Department of Neurosurgery, Affiliated Hospital of Shandong Medical University, Jina, Shandong, China; CAV-CON, Inc., Farmington, Connecticut,

United States
Journal: Neurosurgery, 1998, 42 (3) 592-598
ISSN: 0148-396X CODEN: NRSRDY Availability: INIST-18396;
354000079236760190
No. of Refs.: 24 ref.
Document Type: P (Serial) ; A (Analytic)
Country of Publication: United States
Language: English
OBJECTIVE: This laboratory has previously described the aggregation of intravenously administered lipid-coated microbubbles (LCM) around tumors and areas of injury. 7 beta -Hydroxycholesterol has been used to inhibi astrocytic proliferation in nervous system injury models. The compound has been given by direct infusion, by epidural catheter, or in liposomes (delivered stereotactically to the injury site). In this article, we report the use of LCM to deliver 7 beta -hydroxycholesterol to a **radiofrequency** injury site in the rat cerebrum. METHODS: First, the ability of LCM to target the thermal lesion in the rat brain was characterized using a lipid-soluble fluorescent dye 3,3-dioctadecyloxacarbocyanine perchlorate. Then, the effectiveness of this delivery system in suppression of glial proliferation was measured by glial fibrillary acidic protein immunoreactivity. RESULTS: Glial fibrillary acidic protein immunoreactivity was significantly reduced when 7 beta -hydroxycholesterol was administered via LCM but not alone, suggesting that astrocytic proliferation would correspondingly be diminished. CONCLUSION: LCM were assessed as a delivery vehicle for 7 beta -hydroxycholesterol in a rat brain **radiofrequency** lesion and found to be efficient in reducing astrogliosis, as measured by glial fibrillary acidic protein immuno reactivity.

English Descriptors: Trauma; Craniocerebral; Radiofrequency; Coated material; Experimental disease; Treatment; Animal; Rat
Broad Descriptors: Rodentia; Mammalia; Vertebrata; Nervous system diseases; Central nervous system disease; Cerebral disorder; Diseases of the osteoarticular system; Skull disease; Rodentia; Mammalia; Vertebrata; Systeme nerveux pathologie; Systeme nerveux central pathologie; Encephale pathologie; Systeme osteoarticulaire pathologie; Crane pathologie; Rodentia; Mammalia; Vertebrata; Sistema nervioso patologia; Sistema nervosio central patologia; Encefalo patologia; Sistema osteoarticular patologia; Craneo patologia

French Descriptors: Traumatisme; Cranioencephalique; Radiofrequence; Materiau revetu; Pathologie experimentale; Traitement; Animal; Rat; Microbulle; 7 beta -Hydroxychlesterol

Classification Codes: 002B16B

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Set     Items   Description
S1    8955545   INJECT? OR INFUS??? OR INTRODUC???? OR INTRO()DUC???? OR A-
            DMINIST?
S2     423389   NEEDL? OR SYRINGE? OR HOLLOW??? OR HYPODERMIC? OR HYPO()DE-
            RMIC?
S3     346759   RADIO()FREQUENC? OR RF OR RADIOFREQUENC?
S4    1943091   HYPERTHERM? OR THERMAL? OR RADIAN?()ENERG???
S5    1317767   GEL OR GELS OR JELLY OR JELLIES OR GELATUM? OR GELATIN???
S6     979087   MICROBUBBLE? OR MICRO()BUBBLE? OR CAPSUL?? OR ENCAPSUL? OR
            MICROSPHER? OR MICROBEAD? OR MICROCAPSUL? OR GLOBUL? OR QUANT-
            UM()(DOT OR DOTS) OR BEAD???
S7    7524834   PY=2001:2002
S8    9185483   PY=2003:2005
S9        212   S1:S2 (S) S3 (S) S5
S10       133   S9 NOT S7:S8
S11        93   RD (unique items)
S12     23851   S1:S2 (10N) S5
S13     23851   S12 (S) S5
S14        50   S12 (S) S3
S15        31   S14 NOT S7:S8
S16        17   RD (unique items)
S17       611   S1:S2 (S) S5:S6 (S) S3
S18       145   S1:S2 (10N) S5:S6 (10N) S3
S19        77   S18 NOT S7:S8
S20        37   RD (unique items)
S21        29   S20 NOT S15
S22       377   S1:S2(10N)S5:S6 AND S3
S23       252   S22 NOT S18
S24       156   S23 NOT S7:S8
S25       130   RD (unique items)
S26  14307337   TREAT???? OR THERAP?/DE
S27        91   S25 AND S26
S28   8283869   (TREAT???? OR THERAP?)/DE
S29        43   S25 AND S28
S30         0   S1(S)S2(S)S3(S)S4(S)S5(S)S6
? show files
File   2:INSPEC 1969-2005/Jun W2
         (c) 2005 Institution of Electrical Engineers
File   5:Biosis Previews(R) 1969-2005/Jun W2
         (c) 2005 BIOSIS
File   6:NTIS 1964-2005/Jun W2
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File  34:SciSearch(R) Cited Ref Sci 1990-2005/Jun W3
         (c) 2005 Inst for Sci Info
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
File  35:Dissertation Abs Online 1861-2005/May
         (c) 2005 ProQuest Info&Learning
File  73:EMBASE 1974-2005/Jun 21
         (c) 2005 Elsevier Science B.V.
File  94:JICST-EPlus 1985-2005/May W1
         (c)2005 Japan Science and Tech Corp(JST)
File 144:Pascal 1973-2005/Jun W2
         (c) 2005 INIST/CNRS
File 155:MEDLINE(R) 1951-2005/Jun W3
         (c) format only 2005 The Dialog Corp.
File 149:TGG Health&Wellness DB(SM) 1976-2005/Jun W2
         (c) 2005 The Gale Group
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29/5/5 (Item 1 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

02036866 Genuine Article#: JW293 Number of References: 15
Title: EFFECTS OF MULTIMODAL TREATMENT AND HYPERTHERMIA ON HEPATIC-TUMORS
Author(s): TANAKA Y; YAMAMOTO K; MURATA T; NAGATA K
Corporate Source: KANSAI MED UNIV,DEPT RADIOL,1 FUMIZONO CHO/MORIGUCHI/OSAKA 570/JAPAN/.
Journal: CANCER CHEMOTHERAPY AND PHARMACOLOGY, 1992, V31, S (NOV), P S111-S114
ISSN: 0344-5704
Language: ENGLISH Document Type: ARTICLE
Geographic Location: JAPAN
Subfile: SciSearch; CC LIFE--Current Contents, Life Sciences; CC CLIN--Current Contents, Clinical Medicine
Journal Subject Category: PHARMACOLOGY & PHARMACY; ONCOLOGY
Abstract: The therapeutic results of Lp-TAE (transcatheter arterial embolization in the presence or absence of Gelfoam particles preceded by the infusion of a mixture of lipiodol and an anticancer drug via the proper hepatic artery) or DSM-TAE (transcatheter arterial embolization with degradable starch **microspheres** and the arterial **injection** of anticancer drugs via the hepatic artery) combined with hyperthermia were evaluated in 30 patients with hepatocellular carcinoma (HCC), 5 subjects with hepatic cholangiocarcinoma, and 22 patients with metastatic liver carcinoma. Hyperthermia was performed using an 8-MHz Thermotron **RF** -8. Tumor temperatures could be measured in 31 patients (54.4%) with malignant lesions of the liver who had undergone hyperthermia. The mean maximal temperature (T(max)) was 41.5-degrees-C in the metastatic liver cancers. The efficiency of heating in HCC was unfavorable, i.e., the mean T(max) was only 40.7-degrees-C. The rise in tumor temperature was greater in either HCC or metastatic liver carcinoma associated with portal invasion of the lesion. The tumor-temperature elevation was also excellent in HCC that had been subjected to embolization with DSM in combination with hyperthermia. The response rate (complete response plus partial response) was as high as 40% (4/10) in the group in which the tumor temperature could be raised to 42-degrees-C or more. Among the 52 patients who had shown a high pretreatment level of tumor marker, that value decreased in 34 cases (65.4%), and the decrease was greater than 50% in 22 cases (42.3%).
Descriptors--Author Keywords: HYPERTHERMIA ; HEPATIC TUMOR ; MULTIMODAL **TREATMENT**
Identifiers--KeyWords Plus: STARCH MICROSPHERES; ARTERY LIGATION; LIVER-TUMORS; BLOOD-FLOW; RATS; EMBOLIZATION; CHEMOTHERAPY
Cited References:
AROSEN KF, 1979, V11, P99, EUR SURG RES
CARLSSON G, 1981, V17, P249, J SURG ONCOL
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DAKHIL S, 1982, V50, P631, CANCER
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TANAKA Y, 1981, P95, FUNDAMENTALS CANCER
ZIESSMAN HA, 1983, V24, P871, J NUCL MED

29/5/12 (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

08351645 PMID: 2843131

[Chemoembolization and regional hyperthermia with degradable starch microspheres in the treatment of malignant hepatic tumors]

Yoshikawa T; Oyamada H; Itani K; Tainaka K; Seto O; Sugino S; Kondo M
First Dept. of Internal Medicine, Kyoto Prefectural University of Medicine.

Gan to kagaku ryoho. Cancer & chemotherapy (JAPAN) Aug 1988, 15 (8 Pt 2) p2646-52, ISSN 0385-0684 Journal Code: 7810034
Publishing Model Print
Document type: Journal Article ; English Abstract
Languages: JAPANESE
Main Citation Owner: NLM
Record type: MEDLINE; Completed
Subfile: INDEX MEDICUS

Antitumor effects of chemoembolization with degradable starch microspheres (DSM) combined with regional hyperthermia (HT) were investigated in patients with hepatocellular carcinoma and metastatic liver cancer. Chemoembolization with DSM was performed in 39 cases of hepatocellular carcinoma (HCC) and in 25 cases of metastatic liver cancer. Thirteen cases of HCC and 3 cases of metastatic liver cancer were treated with the combination of HT. A catheter was placed in the proper hepatic artery via the trans-femoral approach. Adriamycin or Mitomycin C mixed with DSM was injected every 2 or 3 weeks through the catheter. Thermotron **RF** -8, the heating device used in this study, is operated at 8 MHz **radiofrequency** . Hyperthermia treatment was applied twice a week. The therapeutic effect of this treatment was evaluated by the change in tumor size measured by angiography or computed tomography. Tumor regression over 50% was observed in 42% of the patients with HCC treated with chemoembolization alone and in 54% of those with chemoembolization and HT. In the patients with metastatic liver cancer, tumor regression over 50% was observed in 65% of the patients treated with chemoembolization alone and in 33% of those with chemoembolization and HT. One-year survival rate after the initial treatment in patients with HCC was 66% and 89% in the patients treated with chemoembolization alone and with chemoembolization and HT, respectively. One and two-year survival rates in the patients with metastatic liver cancer was 55% and 41% in the treatment with chemoembolization alone. These results suggest that chemoembolization using DSM was markedly effective in the patients with malignant hepatic tumors, particularly in metastatic liver cancer.

Tags: Comparative Study
Descriptors: *Antineoplastic Combined Chemotherapy Protocols-- **therapeutic** use--TU; *Embolization, **Therapeutic** ; *Hyperthermia, Induced ; *Liver Neoplasms-- **therapy** --TH; *Starch--administration and dosage--AD; Carcinoma, Hepatocellular--mortality--MO; Carcinoma, Hepatocellular-- **therapy** --TH; Combined Modality **Therapy** ; Doxorubicin--administration and dosage--AD; Embolization, **Therapeutic** --methods--MT; Humans; Hyperthermia, Induced--methods--MT; Liver Neoplasms--mortality--MO; Liver Neoplasms --secondary--SC; **Microspheres** ; Mitomycin; Mitomycins-- **administration** and dosage--AD; Prognosis; Remission Induction
CAS Registry No.: 0 (Antineoplastic Combined Chemotherapy Protocols); 0 (Mitomycins); 23214-92-8 (Doxorubicin); 50-07-7 (Mitomycin); 9005-25-8 (Starch)
Record Date Created: 19881007
Record Date Completed: 19881007

29/5/13 (Item 2 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

08284802 PMID: 2837995
[Effects of hyperthermia combined with chemoembolization using degradable starch microspheres in the treatment of hepatocellular carcinoma]
Itani K; Yoshikawa T; Tainaka K; Oyamada Y; Sugino S; Kondo M; Seto O
Fisrt Dept. of Internal Medicine, Kyoto Prefectural University of Medicine.
Gan to kagaku ryoho. Cancer & chemotherapy (JAPAN) Apr 1988, 15 (4 Pt 2-2) p1418-22, ISSN 0385-0684 Journal Code: 7810034
Publishing Model Print
Document type: Journal Article ; English Abstract
Languages: JAPANESE
Main Citation Owner: NLM
Record type: MEDLINE; Completed
Subfile: INDEX MEDICUS
Twenty-eight cases with non-resectable hepatocellular carcinoma were examined. Chemoembolization using degradable starch microspheres (DSM) was performed in 19 cases. DSM, 40-45 micron in diameter, which are degraded by serum amylase, temporarily obstruct arterial blood flow at capillary bed. Adriamycin mixed with DSM was injected into patients through the proper hepatic artery. Hyperthermia (8 MHz **radiofrequency**) combined with chemoembolization was performed in 9 cases. In all cases treated by hyperthermia combined with chemoembolization, the intratumoral temperature was measured by a thermocouple thermometer during heating alone and heating after injection of DSM. The therapeutic effect was evaluated by the change in tumor size measured by angiography or computed tomography. The efficacy of hyperthermia combined with chemoembolization was compared with that of chemoembolization alone. Intratumoral temperature was 1.0 degree C higher by heating after injection of DSM than by heating alone. Partial response (tumor regression of over 50%) was observed in 8 of 19 cases (42%) with chemoembolization alone. Partial response was observed in 6 of 9 cases (67%) with hyperthermia combined with chemoembolization. One-year survival rate was 58% in chemoembolization alone, against 83% in hyperthermia combined with chemoembolization. Our results suggest that hyperthermia combined with chemoembolization using DSM is effective in the treatment of hepatocellular carcinoma.
Tags: Male
Descriptors: *Carcinoma, Hepatocellular-- **therapy** --TH; *Doxorubicin --administration and dosage--AD; *Embolization, **Therapeutic** ; *Hyperthermia, Induced; *Liver Neoplasms-- **therapy** --TH; Adult; Aged; Combined Modality **Therapy** ; Hepatic Artery; Humans; **Microspheres** ; Middle Aged; Prognosis; Radio Waves-- **therapeutic** use--TU; Starch-- **administration** and dosage--AD
CAS Registry No.: 23214-92-8 (Doxorubicin); 9005-25-8 (Starch)
Record Date Created: 19880725
Record Date Completed: 19880725

29/5/14 (Item 3 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

07794652 PMID: 3101604
[Enhancement of anti-tumor effects by arterial embolization combined with hyperthermia in the treatment of hepatic tumors]

Tanaka Y; Murata T; Yoshida M; Kawa S; Sawada S
Gan to kagaku ryoho. Cancer & chemotherapy (JAPAN) Feb 1987, 14 (2) p396-403, ISSN 0385-0684 Journal Code: 7810034
Publishing Model Print
Document type: Journal Article ; English Abstract
Languages: JAPANESE
Main Citation Owner: NLM
Record type: MEDLINE; Completed
Subfile: INDEX MEDICUS

The effectiveness of arterial embolization using DSM (Degradable Starch Microspheres, Spherex, Sweden) combined with hyperthermia were investigated in the treatment of VX2 carcinoma in rabbits and also in human hepatic tumors. These microspheres temporarily obstructed the blood flow at the precapillary level. The blood flow in the tumor was inhibited to a greater extent and for a longer period than in normal muscle. The rise in temperature at the tumor site during heating was shown to be significantly higher than in muscle. The pH in the tumor clearly showed a stronger degree of inhibition than that achieved with hyperthermia alone. Histological examination demonstrated no marked damage to the muscle following DSM + hyperthermia. In the patients with hepatic tumor, hyperthermia was performed using an **RF** Thermotron 8 (8 MHz) externally, followed by injection of 15 ml of DSM combined with anti-cancer drugs via a catheter. The rise of temperature in DSM + chemo-hyperthermia during heating showed a higher value than that with hyperthermia alone and effective cases (PR) totalled 5 from among 8 cases treated. It was concluded that the heating efficiency may be improved by arterial chemo-embolization in the treatment of hepatic tumors.

Tags: Male
Descriptors: *Antineoplastic Combined Chemotherapy Protocols-- **therapeutic** use--TU; *Embolization, **Therapeutic** ; *Hyperthermia, Induced ; *Liver Neoplasms-- **therapy** --TH; Animals; Cisplatin--administration and dosage--AD; Doxorubicin--administration and dosage--AD; Humans; **Injections** , Intra-Arterial; Liver Circulation; Liver Neoplasms--pathology--PA; **Microspheres** ; Middle Aged; Mitomycin; Mitomycins-- **administration** and dosage--AD; Rabbits; Starch-- **administration** and dosage--AD
CAS Registry No.: 0 (Antineoplastic Combined Chemotherapy Protocols); 0 (Mitomycins); 15663-27-1 (Cisplatin); 23214-92-8 (Doxorubicin); 50-07-7 (Mitomycin); 9005-25-8 (Starch)
Record Date Created: 19870311
Record Date Completed: 19870311
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S2     396558   NEEDL? OR SYRINGE? OR HOLLOW??? OR HYPODERMIC? OR HYPO()DE-
            RMIC?
S3     225585   RADIO()FREQUENC? OR RF OR RADIOFREQUENC?
S4    1489196   HYPERTHERM? OR THERMAL? OR RADIAN?()ENERG???
S5    1284579   GEL OR GELS OR JELLY OR JELLIES OR GELATUM? OR GELATIN???
S6     135054   LIPOSOME? OR LIPO()SOME? ?
S7    6792428   PY=2001:2002
S8    8389106   PY=2003:2005
S9      17803   S1:S2(10N)S6
S10        52   S9 AND S3
S11        27   S10 NOT S7:S8
S12        17   RD (unique items)
S13      1872   S5(5N)S6
S14         0   S13 (S) S3
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File   5:Biosis Previews(R) 1969-2005/Jun W2
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         (c) 2005 NTIS, Intl Cpyrght All Rights Res
File  34:SciSearch(R) Cited Ref Sci 1990-2005/Jun W3
         (c) 2005 Inst for Sci Info
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
File  35:Dissertation Abs Online 1861-2005/May
         (c) 2005 ProQuest Info&Learning
File  73:EMBASE 1974-2005/Jun 21
         (c) 2005 Elsevier Science B.V.
File  94:JICST-EPlus 1985-2005/May W1
         (c)2005 Japan Science and Tech Corp(JST)
File 144:Pascal 1973-2005/Jun W2
         (c) 2005 INIST/CNRS
File 155:MEDLINE(R) 1951-2005/Jun W3
         (c) format only 2005 The Dialog Corp.
File 149:TGG Health&Wellness DB(SM) 1976-2005/Jun W2
         (c) 2005 The Gale Group
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12/5/1 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0011391514 BIOSIS NO.: 199800185761
The use of lipid-coated microbubbles as a delivery agent of 7beta-hydroxycholesterol in a radiofrequency lesion in the rat brain
AUTHOR: Wakefield Andrew E (Reprint); Ho Shih-Yieh; Li Xin-Gang; D'Arrigo Joseph S; Simon Richard H
AUTHOR ADDRESS: Hartford Hosp., Dep. Neurosurgery, 85 Jefferson St., Suite 607, P.O. Box 5037, Hartford, CT 06102-5037, USA**USA
JOURNAL: Neurosurgery (Baltimore) 42 (3): p592-598 March, 1998 1998
MEDIUM: print
ISSN: 0148-396X
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: OBJECTIVE: This laboratory has previously described the aggregation of intravenously administered lipid-coated microbubbles (LCM) around tumors and areas of injury. 7beta-Hydroxycholesterol has been used to inhibit astrocytic proliferation in nervous system injury models. The compound has been given by direct **infusion** , by epidural catheter, or in **liposomes** (delivered stereotactically to the injury site). In this article, we report the use of LCM to deliver 7beta-hydroxycholesterol to a **radiofrequency** injury site in the rat cerebrum. METHODS: First, the ability of LCM to target the thermal lesion in the rat brain was characterized using a lipid-soluble fluorescent dye 3,3-dioctadecyloxacarbocyanine perchlorate. Then, the effectiveness of this delivery system in suppression of glial proliferation was measured by glial fibrillary acidic protein immunoreactivity. RESULTS: Glial fibrillary acidic protein immunoreactivity was significantly reduced when 7beta-hydroxycholesterol was administered via LCM but not alone, suggesting that astrocytic proliferation would correspondingly be diminished. CONCLUSION: LCM were assessed as a delivery vehicle for 7beta-hydroxycholesterol in a rat brain **radiofrequency** lesion and found to be efficient in reducing astrogliosis, as measured by glial fibrillary acidic protein immunoreactivity.

DESCRIPTORS:
MAJOR CONCEPTS: Nervous System--Neural Coordination; Pharmacology; Radiation Biology
BIOSYSTEMATIC NAMES: Muridae--Rodentia, Mammalia, Vertebrata, Chordata, Animalia
ORGANISMS: rat (Muridae)--Sprague-Dawley
ORGANISMS: PARTS ETC: astrocyte--nervous system, proliferation
COMMON TAXONOMIC TERMS: Animals; Chordates; Mammals; Nonhuman Vertebrates ; Nonhuman Mammals; Rodents; Vertebrates
CHEMICALS & BIOCHEMICALS: glial fibrillary acidic protein; 7beta-hydroxycholesterol--autonomic-drug, proliferation inhibitor
METHODS & EQUIPMENT: lipid-coated microbubbles--drug delivery method; **radiofrequency** injury site targeting--pharmacological method, therapeutic method
CONCEPT CODES:
22024 Pharmacology - Neuropharmacology
02506 Cytology - Animal
06504 Radiation biology - Radiation and isotope techniques
20501 Nervous system - General and methods
20506 Nervous system - Pathology
22100 Routes of immunization, infection and therapy
25508 Development and Embryology - Morphogenesis

BIOSYSTEMATIC CODES:
86375 Muridae

12/5/2 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0010230880 BIOSIS NO.: 199698698713
Targeting chemotherapy for malignant brain tumor using thermosensitive liposome and localized hyperthermia
AUTHOR: Kakinuma Kenichi (Reprint); Tanaka Ryuichi; Takahashi Hideaki; Watanabe Masato; Nakagawa Tadashi; Kuroki Mizuo
AUTHOR ADDRESS: Dep. Neurosurgery, Brain Res. Inst., Niigata Univ., 1 Asahimachi, Niigata 951, Japan**Japan
JOURNAL: Journal of Neurosurgery 84 (2): p180-184 1996 1996
ISSN: 0022-3085
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: Thermosensitive liposomes are microscopic vesicles that can contain drugs and release them effectively in response to hyperthermia. To deliver an antitumor drug specifically to brain tumor, the authors used thermosensitive liposomes containing cis-diamminedichloroplatinum (CDDP) in conjunction with localized brain heating. The authors then investigated the antitumor effect on rat malignant glioma. Rous sarcoma virus-induced malignant glioma cells were transplanted into the brains of Fisher rats. Ten days after tumor inoculation, the rats were assigned to one of six treatment groups: control, free CDDP, hyperthermia, free CDDP + hyperthermia, liposomes containing CDDP (CDDP-liposome), and CDDP-**liposome** + hyperthermia. **Liposomes** containing CDDP or free CDDP were **injected** via the tail vein. Brain tumor heating was administered by means of a **radiofrequency** antenna designed at our institute. The rats treated with CDDP-liposome + hyperthermia had the longest survival time and the turner CDDP level of this group was the highest when compared to the other groups. Histopathological examination showed that tumor cells were necrotized but surrounding normal brain tissue remained undamaged. On the basis of these findings we suggest that the combination of thermosensitive liposome and localized hyperthermia may better focus antitumor drugs to the tumor, providing a significantly greater antitumor effect.

REGISTRY NUMBERS: 15663-27-1: CIS-DIAMMINEDICHLOROPLATINUM
DESCRIPTORS:
MAJOR CONCEPTS: Nervous System--Neural Coordination; Pathology; Pharmacology; Physiology; Tumor Biology
BIOSYSTEMATIC NAMES: Muridae--Rodentia, Mammalia, Vertebrata, Chordata, Animalia
ORGANISMS: rat (Muridae)
COMMON TAXONOMIC TERMS: Animals; Chordates; Mammals; Nonhuman Vertebrates ; Nonhuman Mammals; Rodents; Vertebrates
CHEMICALS & BIOCHEMICALS: CIS-DIAMMINEDICHLOROPLATINUM
MISCELLANEOUS TERMS: ANTINEOPLASTIC-DRUG; CIS-DIAMMINEDICHLOROPLATINUM; THERMOTHERAPY
CONCEPT CODES:
10060 Biochemistry studies - General
10618 External effects - Temperature as a primary variable - hot
12512 Pathology - Therapy
20506 Nervous system - Pathology
22024 Pharmacology - Neuropharmacology

23005 Temperature - Thermotherapy
23006 Temperature - Hypothermia and hyperthermia
24004 Neoplasms - Pathology, clinical aspects and systemic effects
24008 Neoplasms - Therapeutic agents and therapy
BIOSYSTEMATIC CODES:
86375 Muridae

12/5/3 (Item 3 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0006144401 BIOSIS NO.: 198885113292
TREATMENT OF EXPERIMENTAL BLADDER CANCER WITH HYPERTHERMIA AND PHASE TRANSITION LIPOSOMES CONTAINING METHOTREXATE
AUTHOR: BASSETT J B (Reprint); TACKER J R; ANDERSON R U; BOSTWICK D
AUTHOR ADDRESS: DIV UROL, STANFORD MED CENTER, S-287, STANFORD, CALIF 94305, USA**USA
JOURNAL: Journal of Urology 139 (3): p634-636 1988
ISSN: 0022-5347
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

ABSTRACT: Serially transplanted murine bladder cancer was treated with localized capacitive **radiofrequency** hyperthermia and liposome-delivered methotrexate (MTX). Liposomes were manufactured to retain MTX at 37C but specifically release encapsulated MTX as they passed through preheated tumors. When compared to controls, neither free MTX nor liposome-delivered MTX caused significant tumoricidal activity. Heat alone did cause a slowing of tumor growth and an increase in animal survival. Because large unilamellar liposomes are known to be cleared by the liver, sixteen animals were autopsied to determine the extent of liver toxicity which may have been a result of the various treatments. No hepatotoxic effects were observed after **injection** of **liposomes** containing MTX or other experimental combinations of drug and/or liposomes.

REGISTRY NUMBERS: 59-05-2: METHOTREXATE
DESCRIPTORS: MURINE ANTINEOPLASTIC-DRUG
DESCRIPTORS:
MAJOR CONCEPTS: Pathology; Pharmacology; Physiology; Tumor Biology; Urinary System--Chemical Coordination and Homeostasis
BIOSYSTEMATIC NAMES: Muridae--Rodentia, Mammalia, Vertebrata, Chordata, Animalia
COMMON TAXONOMIC TERMS: Animals; Chordates; Mammals; Nonhuman Vertebrates ; Nonhuman Mammals; Rodents; Vertebrates
CHEMICALS & BIOCHEMICALS: METHOTREXATE
CONCEPT CODES:
10060 Biochemistry studies - General
10618 External effects - Temperature as a primary variable - hot
12512 Pathology - Therapy
15506 Urinary system - Pathology
22003 Pharmacology - Drug metabolism and metabolic stimulators
22032 Pharmacology - Urinary system
23005 Temperature - Thermotherapy
23006 Temperature - Hypothermia and hyperthermia
24008 Neoplasms - Therapeutic agents and therapy
BIOSYSTEMATIC CODES:
86375 Muridae

12/5/4 (Item 4 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0003835974 BIOSIS NO.: 198375019917
EFFECTS OF PARTIALLY THIOLATED POLY CYTIDYLIC-ACID AND LIPOSOMES ON IN-VITRO COLONY FORMING CELLS OF LEUKEMIC MICE
AUTHOR: HO Y-K (Reprint); MAYHEW E; PREISLER H D; BARDOS T J
AUTHOR ADDRESS: DEP BIOPHYS SCI, STATE UNIV NY, BUFFALO, NY 14214, USA**USA
JOURNAL: Cancer Research 42 (5): p1740-1743 1982
ISSN: 0008-5472
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

ABSTRACT: Partially thiolated polycytidylic acid (MPC), an antileukemic agent, when administered to leukemic **RF** /UN mice inhibited the clonogenicity of bone marrow progenitor cells in a time- and dose-dependent manner. The effect of a single dose of MPC disappeared within 40 h due to the rapid degradation of this compound in mice. When MPC was encapsulated in **liposomes** before **injection** , its activity at 19 h after inoculation was similar to that of free MPC. The inhibitory effect of this liposome-MPC complex, persisted for at least 40 h, indicating that the MPC was protected from hydrolysis by the nucleases present in blood. Drug-free liposomes increased the number of clonogenic progenitor cells; a mixture of plain liposomes and MPC decreased the number of clonogenic cells to a greater extent than did MPC alone or MPC within liposomes. The liposomes per se may have altered the clearance function of the RES and competed with MPC for uptake by the RES cells, thereby resulting in increased plasma levels of MPC which in turn resulted in greater killing of the target cells.

REGISTRY NUMBERS: 30811-80-4: POLYCYTIDYLIC-ACID; 9026-81-7D: NUCLEASES
DESCRIPTORS: BONE MARROW PROGENITOR CELLS RES ANTINEOPLASTIC-DRUG HEMATOLOGIC-DRUG NUCLEASES
DESCRIPTORS:
MAJOR CONCEPTS: Blood and Lymphatics--Transport and Circulation; Cell Biology; Metabolism; Pharmacology; Tumor Biology
BIOSYSTEMATIC NAMES: Muridae--Rodentia, Mammalia, Vertebrata, Chordata, Animalia
COMMON TAXONOMIC TERMS: Animals; Chordates; Mammals; Nonhuman Vertebrates ; Nonhuman Mammals; Rodents; Vertebrates
CHEMICALS & BIOCHEMICALS: POLYCYTIDYLIC-ACID; NUCLEASES
CONCEPT CODES:
02506 Cytology - Animal
10010 Comparative biochemistry
10062 Biochemistry studies - Nucleic acids, purines and pyrimidines
10064 Biochemistry studies - Proteins, peptides and amino acids
10808 Enzymes - Physiological studies
12510 Pathology - Necrosis
12512 Pathology - Therapy
13014 Metabolism - Nucleic acids, purines and pyrimidines
15002 Blood - Blood and lymph studies
15004 Blood - Blood cell studies
15006 Blood - Blood, lymphatic and reticuloendothelial pathologies
15008 Blood - Lymphatic tissue and reticuloendothelial system
18001 Bones, joints, fasciae, connective and adipose tissue - General and methods
22003 Pharmacology - Drug metabolism and metabolic stimulators
22008 Pharmacology - Blood and hematopoietic agents

22100 Routes of immunization, infection and therapy
24008 Neoplasms - Therapeutic agents and therapy
32500 Tissue culture, apparatus, methods and media
38502 Chemotherapy - General, methods and metabolism
BIOSYSTEMATIC CODES:
86375 Muridae

12/5/5 (Item 1 from file: 6)
DIALOG(R)File 6:NTIS

1441989 NTIS Accession Number: NTN89-0139
Liposomes Provide New Method for Drug Delivery
(NTIS Tech Note)
Department of Energy, Washington, DC.
Corp. Source Codes: 052661000
Feb 89 1p
Languages: English
Journal Announcement: GRAI8915
FOR ADDITIONAL INFORMATION: Contact: Public Information Department, Lawrence Berkeley Laboratory, 1 Cyclotron Road, Berkeley, CA 94720; (415) 486-5771.
NTIS Prices: Not available NTIS
Country of Publication: United States
This citation summarizes a one-page announcement of technology available for utilization. Imagine waking after surgery to learn you have already been injected with all the drugs you will need during recovery: to release a dose into your bloodstream, you need simply hold a magnet or microwave wand over a particular point on an arm or leg. Based on animal experiments, this approach to drug delivery appears promising, says Robert Liburdy of Lawrence Berkeley Laboratory, who has been studying the packaging of therapeutic drugs in liposomes -- microscopic, membrane-bound vesicles made in the laboratory. Liburdy, a scientist in LBL's Research Medicine and Radiation Biophysics Division, has shown that **liposomes injected** into muscle tissue in rats will release antibiotics such as gentamicin in response to an oscillating electromagnetic field in the microwave or **radio - frequency** range, and that liposomes in a test tube will release drugs in response to either a magnetic or electromagnetic field. In human patients, a **liposome** 'depot' could be **injected** into either muscle or fat. Because **liposomes** can be made of natural or well-tolerated synthetic substances that are not rejected by the body, the depot would remain, with very little breakdown, until the drug was needed. Then, to release the drug, the patient would hold a magnet or an electromagnetic field applicator over the depot. There are many possible uses for Liburdy's techniques. For example, people who regularly require a drug that must be injected, but cringe at the idea of self-injection, could have multiple injections at the doctor's office, then use their handy field applicators or magnets to release the drug as needed at home. In other cases, a drug that must be administered by a medical professional could be injected at the patient's or doctor's convenience, then released when actually needed.
Descriptors: *Electromagnetic radiation
Identifiers: *Liposomes; *Delayed action preparations; *Self medication; *Drug implants; NTISNTND
Section Headings: 44H (Health Care--Health Care Technology); 57B (Medicine and Biology--Biochemistry); 57E (Medicine and Biology--Clinical Medicine)

12/5/6 (Item 1 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

02116042 Genuine Article#: KB979 Number of References: 43
Title: PHARMACOKINETICS AND THERAPEUTICS OF STERICALLY STABILIZED LIPOSOMES IN MICE BEARING C-26 COLON-CARCINOMA
Author(s): HUANG SK; MAYHEW E; GILANI S; LASIC DD; MARTIN FJ; PAPAHADJOPOULOS D
Corporate Source: UNIV CALIF SAN FRANCISCO,CANC RES INST,BOX 128/SAN FRANCISCO//CA/94143; UNIV CALIF SAN FRANCISCO,DEPT PHARMACOL/SAN FRANCISCO//CA/94143; NEW YORK STATE DEPT HLTH,ROSWELL PK MEM INST,DEPT EXPTL PATHOL/BUFFALO//NY/14263; NEW YORK STATE DEPT HLTH,ROSWELL PK MEM INST,DEPT EXPTL THERAPEUT/BUFFALO//NY/14263; NEW YORK STATE DEPT HLTH,ROSWELL PK MEM INST,DIV NUCL MED/BUFFALO//NY/14263; LIPOSOME TECHNOL INC/MENLO PK//CA/94025
Journal: CANCER RESEARCH, 1992, V52, N24 (DEC 15), P6774-6781
ISSN: 0008-5472
Language: ENGLISH Document Type: ARTICLE
Geographic Location: USA
Subfile: SciSearch; CC LIFE--Current Contents, Life Sciences; CC CLIN--Current Contents, Clinical Medicine
Journal Subject Category: ONCOLOGY
Abstract: Three different liposome types were compared for blood clearance and tissue uptake in mice bearing C-26 colon carcinoma growing either s.c. or in liver. Therapeutic experiments were performed with the liposome preparation showing the highest tumor uptake. Liposomes were composed of solid-phase phosphatidylcholine, either distearoyl phosphatidylcholine or hydrogenated soy phosphatidylcholine, and cholesterol at a 2:1 molar ratio. These liposomes were compared with similar but sterically stabilized liposomes (SL) which, in addition, contained either G(M1) ganglioside or phosphatidylethanolamine derivatized with poly(ethylene glycol). Pharmacokinetic analysis of drug disposition was based on the areas under the curve for liposome-entrapped Ga-67 uptake per gram of tissue up to 96 h following i.v. **injection** . The highest tissue area under the curve values with both **liposome** types were obtained in spleen, liver, and tumor. However, the sterically stabilized liposomes gave an area under the curve value 2-3-fold higher in the s.c. tumor and about 2-fold lower in liver and spleen. The therapeutic efficacy of doxorubicin (DOX) and epirubicin (EPI) encapsulated in poly(ethylene glycol)-derivatized phosphatidylethanolamine-containing liposomes was compared with that of free drug at two doses, 6 and 9 (or 10) mg/kg animal weight. **Liposomes** containing drug were **injected** either as a single dose, at different times following tumor implantation, or as three weekly doses starting 10 days after implantation. When **injected** as a single dose, **liposome** -encapsulated DOX had the maximal effect on tumor growth when **injected** 6 to 9 days after tumor implantation. When injected as three weekly doses, with treatment starting with a delay of 10 days, tumors which had grown to a size of approximately 0.05-0.1 cm3 regressed in groups of animals treated with either liposome-encapsulated drug (SL-DOX or SL-EPI) but continued to grow unabated in untreated mice and in mice receiving either of the free drugs. Survival of tumor-bearing animals treated with either SL-EPI or SL-DOX "as significantly prolonged. Animals receiving saline, EPI. or DOX survived a mean of 50, 62, and 49 days, respectively, following tumor implantation. Eight of nine and nine of 10 animals receiving 6 and 9 mg/kg SL-EPI, respectively, survived to 120 days. Ten of 10 animals in both groups receiving 6 and 9 mg/kg SL-DOX survived to 120 days. None of the surviving animals in the SL-EPI and SL-DOX group showed any histological evidence of tumor at the conclusion of the experiment (120 days). These data show that EPI and DOX encapsulated in sterically stabilized liposomes are significantly more active against C-26 colon carcinoma than is free

drug. These two drugs appear to have similar potency under the experimental conditions used in this study.
Identifiers--KeyWords Plus: TUMOR-MODEL; RETICULOENDOTHELIAL SYSTEM; UNILAMELLAR LIPOSOMES; EXPERIMENTAL THERAPY; CIRCULATION TIMES; LIVER METASTASES; VESICLE-SIZE; INVIVO; ADRIAMYCIN; DOXORUBICIN
Research Fronts: 90-0207 002 (STEALTH LIPOSOMES; MURAMYL DIPEPTIDE (MDP); MACROPHAGE ACTIVATION; DRUG DELIVERY; LONG HALF-LIFE INVIVO; PROLONGED CIRCULATION TIME; TUMORICIDAL ACTIVITY)
90-0057 001 (ULTRASOUND HYPERTHERMIA; NECK TUMORS; TIME-VARYING MAGNETIC-FIELDS; INTERSTITIAL THERMORADIOTHERAPY; **RADIOFREQUENCY** EXPOSURE)
90-1763 001 (SMALL UNILAMELLAR LIPOSOMES; DRUG CARRIERS; TARGETED DELIVERY; INVITRO INTERACTION; TISSUE DISTRIBUTION IN RATS; LIPID VESICLES)
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12/5/7 (Item 2 from file: 34)

01970861 Genuine Article#: JQ455 Number of References: 35
Title: MICROSCOPIC LOCALIZATION OF STERICALLY STABILIZED LIPOSOMES IN COLON CARCINOMA-BEARING MICE
Author(s): HUANG SK; LEE KD; HONG K; FRIEND DS; PAPAHADJOPOULOS D
Corporate Source: UNIV CALIF SAN FRANCISCO,CANC RES INST,BOX 0128/SAN FRANCISCO//CA/94143; UNIV CALIF SAN FRANCISCO,DEPT PATHOL/SAN FRANCISCO//CA/94143
Journal: CANCER RESEARCH, 1992, V52, N19 (OCT 1), P5135-5143
ISSN: 0008-5472
Language: ENGLISH Document Type: ARTICLE
Geographic Location: USA
Subfile: SciSearch; CC LIFE--Current Contents, Life Sciences
Journal Subject Category: ONCOLOGY
Abstract: Using light and electron microscopy, we investigated the in vivo distribution of liposomes sterically stabilized by specific lipids which prolong their circulation in blood. Tissue distribution of sterically stabilized liposomes composed of distearoyl phosphatidylcholine: cholesterol:monosialoganglioside G(M1) (10:5:1)-encapsulated Ga-67-Des-feral indicates that more than 30% of liposomes still remain in the blood at 24 h after tail vein **injection** . Moreover, such **liposomes** accumulated in tumors (C-26 colon carcinoma cells implanted s.c.) , reaching almost the same level of uptake as liver (approximately 20% **injected** dose/g tissue). The microscopic localization of **liposomes** labeled with encapsulated colloidal gold or rhodamine-labeled dextran coincided well with the tissue distribution. To evaluate circulation parameters, two sizes of gold-containing egg phosphatidylcholine:cholesterol:distearoyl phosphatidylethanolamine (derivatized at its amino position with a 1900 molecular weight segment of polyethylene glycol) (10:5:0.8) **liposomes** were **injected** . The plasma was examined by electron microscopy of negative stained preparations at 0.5, 4, and 24 h after **liposome injection** . It was found that the ratio of small (<100 nm diameter) to large (>100 nm) liposomes increased with time, indicating a much faster clearance of the larger liposomes. To detect the localization of liposomes in various tissues, appropriate samples were fixed 24 h after the **injection** of gold-containing **liposomes** (between 80 and 100 nm in diameter) composed of egg phosphatidylcholine:cholesterol:monosialoganglioside G(M1) (10:5:1) or egg phosphatidylcholine:cholesterol:derivatized distearoyl phosphatidylethanolamine. The tissues examined for this study included normal liver, bone marrow, and implanted neoplasms. Silver-enhanced colloidal gold was found predominantly within Kupffer cells in the normal liver and within macrophages in the bone marrow. Rarely were any silver-enhanced gold particles detected in hepatocytes. In all preparations, electron microscopy revealed the presence of gold in endosomes and lysosomes of fixed sinusoidal lining macrophages in the liver and bone marrow. Peripheral to the implanted tumors, silver enhancement revealed gold in small blood vessels and focally beyond the vessel boundaries in extracellular spaces around tumor cells. Gold particles were not observed within the tumor cell cytoplasm. At the tumor border, nonenhanced gold was occasionally seen by electron microscopy in cells of the mononuclear phagocyte system. We obtained the same localization pattern as with silver enhancement by using an alternative aqueous content marker, rhodamine B isothiocyanate-dextran. We conclude that liposomes of specific composition, which have the ability to remain in circulation with a half-life of 12-24 h, are also able to traverse the endothelium of small blood vessels, including

those in tumors, and extravasate into extracellular spaces. The persistence of such liposomes in the circulation and their ability to reach tumor cells within a solid carcinoma make them highly attractive vehicles for chemotherapeutic agents.
Identifiers--KeyWords Plus: THERAPEUTIC EFFICACY; COLLOIDAL GOLD; HALF-LIVES; CIRCULATION; TUMORS; INVIVO; TISSUES; BLOOD; SIZE
Research Fronts: 90-0207 002 (STEALTH LIPOSOMES; MURAMYL DIPEPTIDE (MDP); MACROPHAGE ACTIVATION; DRUG DELIVERY; LONG HALF-LIFE INVIVO; PROLONGED CIRCULATION TIME; TUMORICIDAL ACTIVITY)
90-0057 001 (ULTRASOUND HYPERTHERMIA; NECK TUMORS; TIME-VARYING MAGNETIC-FIELDS; INTERSTITIAL THERMORADIOTHERAPY; **RADIOFREQUENCY** EXPOSURE)
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12/5/8 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE

02148157 EMBASE No: 1982127273
Effects of partially thiolated polycytidylic acid and liposomes on in vitro colony-forming cells of leukemic mice
Ho Y.K.; Mayhew E.; Preisler H.D.; Bardos T.J.
Dep. Biophys. Sci., State Univ. New York, Buffalo, NY 14214 United States
Cancer Research (CANCER RES.) (United States) 1982, 42/5 (1740-1743)

CODEN: CNREA
DOCUMENT TYPE: Journal
LANGUAGE: ENGLISH

Partially thiolated polycytidylic acid (MPC), an antileukemic agent, when administered to leukemic **RF** /UN mice inhibited the clonogenicity of bone marrow progenitor cells in a time- and dose-dependent manner. The effect of a single dose of MPC disappeared within 40 hr due to the rapid degradation of this compound in mice. When MPC was encapsulated in **liposomes** before **injection** , its activity at 19 hr after inoculation was similar to that of free MPC. The inhibitory effect of this liposome-MPC complex, however, persisted for at least 40 hr, indicating that the MPC was protected from hydrolysis by the nucleases present in blood. Drug-free liposomes increased the number of clonogenic progenitor cells, whereas a mixture of plain liposomes and MPC decreased the number of clonogenic cells to a greater extent than did MPC alone or MPC within liposomes. A possible explanation for these observations is that the liposomes per se altered the clearance function of the reticuloendothelial system and competed with MPC for uptake by the reticuloendothelial system cells, thereby resulting in increased plasma levels of MPC which in turn resulted in greater killing of the target cells.

MANUFACTURER NAMES: miles/United States; amersham searle/United States
DRUG DESCRIPTORS:
*liposome; *polycytidylic acid
MEDICAL DESCRIPTORS:
*drug delivery system; *leukemia; *reticuloendothelial system
colony formation; colony forming unit; mouse; animal experiment; blood and hemopoietic system; intravenous drug administration; pharmacokinetics
MEDICAL TERMS (UNCONTROLLED): polycytidylic acid h 3
CAS REGISTRY NO.: 30811-80-4 (polycytidylic acid)
SECTION HEADINGS:
037 Drug Literature Index
016 Cancer
025 Hematology

12/5/9 (Item 1 from file: 94)
DIALOG(R)File 94:JICST-EPlus

03648926 JICST ACCESSION NUMBER: 98A0696202 FILE SEGMENT: JICST-E
Hyperthermia Enhancement by Thermosensitive Liposome as a New Thermochemotherapy for Malignant Brain Tumor.
KAKINUMA KEN'ICHI (1); TANAKA RYUICHI (1); TAKAHASHI HIDEAKI (1); TAKAHASHI SHO (1); KATO MASASHI (2)
(1) Brain Res. Inst., Niigata Univ.; (2) Niigata Univ., Med. Hosp.
Nippon Haipasamia Gakkaishi(Japanese Journal of Hyperthermic Oncology), 1998, VOL.14,NO.2, PAGE.87-97, FIG.7, TBL.1, REF.37
JOURNAL NUMBER: L0930AAZ ISSN NO: 0911-2529
UNIVERSAL DECIMAL CLASSIFICATION: 616-006-08+ 615.45
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Journal
ARTICLE TYPE: Review article
MEDIA TYPE: Printed Publication
ABSTRACT: Thermosensitive liposomes are microscopic vesicles that can release their contained drugs effectively in response to hyperthermia (HT). Previously we revealed the combination of thermosensitive liposome containing CDDP and local brain heating using **RF** interstitial antenna showed remarkable antitumor effects against rat malignant gliomas. A new liposome was prepared considering this drug

delivery system as a clinical use. While a transition temperature of the conventional liposomes has been 42 or 43.DEG.C. to enhance the synergistic effect of HT and antitumor drugs, the heated area above 42.DEG.C. was localized in a narrow portion of human glioma. But the width of lower temperature area increased according to the distance from the **RF** antenna and the area of 40 .DEG.C. extended up to the wide portion of the brain tumor. So we prepared a new liposome which can release adriamycin (ADR) above 40.DEG.C.. As a result, this liposome showed significantly great antitumor effects against rat gliomas with the temperature of 40.DEG.C.. This procedure 1) helps to deliver the antitumor drugs more widely to glioma and contributes to the synergistic effect of HT and antitumor drugs in the regions above 40.DEG.C., 2) is effective in direct thermal killing in the regions above 43.DEG.C., 3) gives a good chance to many antitumor drugs, such as ADR, which have not been used from the problem of blood brain barrier. 4) Moreover this new **liposome** could be **injected** safely intraarterially. In conclusion, the advantage of this plan could outweigh the disadvantages of the conventional thermo-chemotherapy. (author abst.)

DESCRIPTORS: hyperthermia; sensitizer; liposome; glioma; amino sugar; quinone; ketone; polyphenol; deoxysugar; tetracyclines; pyranoside; phenol ether; antineoplastic antibiotics

BROADER DESCRIPTORS: physical therapy; therapy; photographic chemicals; photographic material; material; additive; admixture; lipid membrane; artificial membrane; membrane and film; nervous tissue tumor; tumor; disease; nervous system disease; carbohydrate; carbonyl compound; quinoid compound; phenolic compound; hydroxy compound; aromatic compound; antibiotics; drug; glycoside; ether; antitumor drug

CLASSIFICATION CODE(S): GE03036S; GY02010Z

12/5/10 (Item 2 from file: 94)

02728822 JICST ACCESSION NUMBER: 96A0564942 FILE SEGMENT: JICST-E

Chemo-thermotherapy for malignant brain tumor with the combination of thermosensitive liposome and interstitial hyperthermia.

KAKINUMA KEN'ICHI (1); TANAKA RYUICHI (1); TAKAHASHI HIDEAKI (1); SUDA TSUYOSHI (1); KATO MASASHI (2)
(1) Brain Res. Inst., Niigata Univ.; (2) Niigata Univ., Med. Hosp.

Drug Deliv Syst, 1996, VOL.11,NO.3, PAGE.183-189, FIG.6, TBL.1, REF.15
JOURNAL NUMBER: X0225AAO ISSN NO: 0913-5006 CODEN: DDSYE
UNIVERSAL DECIMAL CLASSIFICATION: 616-006-085 616-006-08+
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Journal
ARTICLE TYPE: Original paper
MEDIA TYPE: Printed Publication

ABSTRACT: Malignant glioma responds poorly to chemotherapy presumably mainly because the antitumor drugs can not be delivered in effective concentrations to the tumor site without causing complications, and because the existence of the blood-brain barrier(BBB) restricts the distribution of many antitumor drugs to malignant gliomas. We used thermosensitive liposomes containing CDDP(cis-diamminedichloroplatinum) with localized heating, and the possibilities of this drug delivery system to the brain tumor were discussed. First, this unique and attractive strategy showed remarkable effects against the RSV-induced subcutaneous tumor which was relatively insensitive to various antitumor agents. The authors then investigated the antitumor effect on rat malignant brain tumor. Ten days after tumor inoculation, six groups were formed: control, free CDDP, hyperthermia, free CDDP+hyperthermia,

CDDP-liposome, and CDDP- **liposome** +hyperthermia. **Liposomes** containing CDDP(CDDP- **liposome**) or free CDDP were **injected** via the tail vein. The brain tumor heating was given using a **radiofrequency** antenna which was designed at our institute. As a result, the rats treated by CDD-P-liposome+hyperthermia had the longest survival time, and the tumor CDDP level of this group was the highest when compared to other groups. These findings suggest that the combination of thermosensitive liposome and localized hyperthermia could, (1) bring a direct thermal killing of the tumor cells, plus (2) increase a permeability of the BBB to transport of CDDP, plus (3) target CDDP-liposomes to the tumor site and produce an effective release of liposomal CDDP with greater activity than when free CDDP was injected. (author abst.)

DESCRIPTORS: hyperthermia; brain tumor; mouse(animal); rat; animal test; temperature dependence; dichlorodiammine platinum; drug therapy; targeting; survival ratio; antitumor action; combination therapy; local administration; liposome

BROADER DESCRIPTORS: physical therapy; therapy; nervous system neoplasm; tumor; disease; nervous system disease; brain disease; central nervous system disease; Myomorpha; Rodentia; Mammalia; Vertebrata; animal; experiment; dependence; ammine complex; complex(compound); coordination compound; compound(chemical); nitrogen compound; nitrogen group element compound; chloro complex; chloride; chlorine compound; halogen compound ; halide; halogeno complex; antitumor drug; drug; platinum complex; platinum compound; platinum group element compound; transition metal compound; platinum group element complex; transition metal complex; metal complex; ratio; pharmacological action; action and effect; administration route; administration(biology); lipid membrane; artificial membrane; membrane and film

CLASSIFICATION CODE(S): GE03032C; GE03036S

12/5/11 (Item 1 from file: 144)

13507985 PASCAL No.: 98-0206408

The use of lipid-coated microbubbles as a delivery agent of 7 beta -hydroxycholesterol in a radiofrequency **lesion in the rat brain. Commentary**

WAKEFIELD A E; HO S Y; LI X G; D'ARRIGO J S; SIMON R H; HODGE C J JR comment; ZLOKOVIC B comment

Department of Surgery, Division of Neurosurgery, University of Connecticut Health Center, Farmington, Connecticut, United States; Department of Neurosurgery, Affiliated Hospital of Shandong Medical University, Jina, Shandong, China; CAV-CON, Inc., Farmington, Connecticut, United States

Journal: Neurosurgery, 1998, 42 (3) 592-598

ISSN: 0148-396X CODEN: NRSRDY Availability: INIST-18396; 354000079236760190

No. of Refs.: 24 ref.

Document Type: P (Serial) ; A (Analytic)

Country of Publication: United States

Language: English

OBJECTIVE: This laboratory has previously described the aggregation of intravenously administered lipid-coated microbubbles (LCM) around tumors and areas of injury. 7 beta -Hydroxycholesterol has been used to inhibi astrocytic proliferation in nervous system injury models. The compound has been given by direct **infusion** , by epidural catheter, or in **liposomes** (delivered stereotactically to the injury site). In this article, we report the use of LCM to deliver 7 beta -hydroxycholesterol to a **radiofrequency**

injury site in the rat cerebrum. METHODS: First, the ability of LCM to target the thermal lesion in the rat brain was characterized using a lipid-soluble fluorescent dye 3,3-dioctadecyloxacarbocyanine perchlorate. Then, the effectiveness of this delivery system in suppression of glial proliferation was measured by glial fibrillary acidic protein immunoreactivity. RESULTS: Glial fibrillary acidic protein immunoreactivity was significantly reduced when 7 beta -hydroxycholesterol was administered via LCM but not alone, suggesting that astrocytic proliferation would correspondingly be diminished. CONCLUSION: LCM were assessed as a delivery vehicle for 7 beta -hydroxycholesterol in a rat brain **radiofrequency** lesion and found to be efficient in reducing astrogliosis, as measured by glial fibrillary acidic protein immuno reactivity.

English Descriptors: Trauma; Craniocerebral; **Radiofrequency** ; Coated material; Experimental disease; Treatment; Animal; Rat
Broad Descriptors: Rodentia; Mammalia; Vertebrata; Nervous system diseases; Central nervous system disease; Cerebral disorder; Diseases of the osteoarticular system; Skull disease; Rodentia; Mammalia; Vertebrata; Systeme nerveux pathologie; Systeme nerveux central pathologie; Encephale pathologie; Systeme osteoarticulaire pathologie; Crane pathologie; Rodentia; Mammalia; Vertebrata; Sistema nervioso patologia; Sistema nervosio central patologia; Encefalo patologia; Sistema osteoarticular patologia; Craneo patologia

French Descriptors: Traumatisme; Cranioencephalique; **Radiofrequence** ; Materiau revetu; Pathologie experimentale; Traitement; Animal; Rat; Microbulle; 7 beta -Hydroxychlesterol

Classification Codes: 002B16B

12/5/12 (Item 1 from file: 149)
DIALOG(R)File 149:TGG Health&Wellness DB(SM)

01675283 SUPPLIER NUMBER: 19175089 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Pulmonary delivery of beclomethasone liposome aerosol in volunteers: tolerance and safety.
Waldrep, J. Clifford; Gilbert, Brian E.; Knight, Caroline M.; Black, Melanie B.; Scherer, Peter W.; Knight, Vernon; Eschenbacher, William
Chest, v111, n2, p316(8)
Feb,
1997
PUBLICATION FORMAT: Magazine/Journal ISSN: 0012-3692 LANGUAGE: English
RECORD TYPE: Fulltext TARGET AUDIENCE: Professional
WORD COUNT: 4385 LINE COUNT: 00398

SPECIAL FEATURES: illustration; table; graph
DESCRIPTORS: Beclomethasone dipropionate--Physiological aspects; Pulmonary gas exchange--Effect of drugs on
FILE SEGMENT: HI File 149

12/5/13 (Item 2 from file: 149)
DIALOG(R)File 149:TGG Health&Wellness DB(SM)

01602870 SUPPLIER NUMBER: 17463487 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Local therapy for cytomegalovirus retinopathy.
Engstrom, Robert E., Jr.; Holland, Gary N.
American Journal of Ophthalmology, v120, n3, p376(10)
Sept,
1995
PUBLICATION FORMAT: Magazine/Journal ISSN: 0002-9394 LANGUAGE: English
RECORD TYPE: Fulltext TARGET AUDIENCE: Professional
WORD COUNT: 6880 LINE COUNT: 00606

DESCRIPTORS: Cytomegalovirus infections--Care and treatment; Retinopathy--Care and treatment
FILE SEGMENT: HI File 149

12/5/14 (Item 3 from file: 149)
DIALOG(R)File 149:TGG Health&Wellness DB(SM)

01476996 SUPPLIER NUMBER: 14975260 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Cellular engineering and gene therapy strategies for insulin replacement in diabetes.
Newgard, Christopher B.
Diabetes, v43, n3, p341(10)
March,
1994
PUBLICATION FORMAT: Magazine/Journal ISSN: 0012-1797 LANGUAGE: English
RECORD TYPE: Fulltext TARGET AUDIENCE: Professional
WORD COUNT: 7818 LINE COUNT: 00803

SPECIAL FEATURES: illustration; chart; graph
DESCRIPTORS: Diabetes, Insulin-dependent--Research; Gene therapy--Research; Insulin--Physiological aspects
FILE SEGMENT: HI File 149

12/5/15 (Item 4 from file: 149)
DIALOG(R)File 149:TGG Health&Wellness DB(SM)

01431236 SUPPLIER NUMBER: 14292677 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Aerosolization of superoxide dismutase: augmentation of respiratory epithelial lining fluid antioxidant screen by aerosolization of recombinant human Cu++/Zn++ superoxide dismutase.
Gillissen, Adrian; Roum, James H.; Hoyt, Robert F.; Crystal, Ronald G.
Chest, v104, n3, p811(5)
Sept,
1993
PUBLICATION FORMAT: Magazine/Journal ISSN: 0012-3692 LANGUAGE: English
RECORD TYPE: Fulltext TARGET AUDIENCE: Professional
WORD COUNT: 3017 LINE COUNT: 00313

SPECIAL FEATURES: illustration; graph
DESCRIPTORS: Pulmonary manifestations of general diseases--Complications; Oxidizing agents--Physiological aspects; Superoxide dismutase--Therapeutic use
FILE SEGMENT: HI File 149

12/5/16 (Item 5 from file: 149)
DIALOG(R)File 149:TGG Health&Wellness DB(SM)

01256576 SUPPLIER NUMBER: 09086895 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Chlorpromazine-induced immunopathy: progressive increase in serum IgM.
Zucker, Stanley; Zarrabi, Hosein M.; Schubach, William H.; Varma, Andre; Derman, Robert; Lysik, Rita M.; Habicht, Gail; Seitz, Patricia M.
Medicine, v69, n2, p92(9)
March,
1990
PUBLICATION FORMAT: Magazine/Journal ISSN: 0025-7974 LANGUAGE: English
RECORD TYPE: Fulltext; Abstract TARGET AUDIENCE: Professional
WORD COUNT: 5672 LINE COUNT: 00474

ABSTRACT: Treatment of schizophrenia with chlorpromazine is now well accepted, and was considered a revolutionary new therapy when it was first introduced in the 1950s. However, there are some serious immunologic side effects that are associated with this drug. Studies have reported the development of antinuclear antibodies and a syndrome which resembles systemic lupus erythematosus as a result of chlorpromazine treatment of long duration. In particular, the abnormalities in the immunoglobulin M (IgM) subclass of antinuclear antibodies have been associated with this treatment in schizophrenics. One study of schizophrenics revealed a 63 percent increase in antinuclear antibodies and a marked increase in IgM levels. This study reports on a five-year evaluation of 54 male schizophrenic patients who had taken chlorpromazine for more than three years, and who were randomly assigned to one of two groups. The first group continued treatment with chlorpromazine, and the second group was switched to haloperidol therapy; seven patients were reassigned to the first group because they did not respond well to haloperidol; 48 patients completed the study. Laboratory tests of blood samples were performed at 4- to 12-month intervals throughout the study. Lymphocyte (white blood cell) function tests and immunoglobulin analyses were also conducted. Case reports of two patients are described in detail. No differences were observed between the two groups in the number or function of T lymphocytes or IgG secreting cells. An increase in IgM levels was noted in the patients receiving chlorpromazine, with 6 out of 29 having a significant increase. Abnormalities that were initially detected, such as high serum IgM, coagulation factor, and antinuclear antibodies did not change in the group that was switched to haloperidol treatment. It was concluded that individual patients have various susceptibilities to developing immunological abnormalities in conjunction with this drug treatment; chlorpromazine is still an attractive therapy, but patients should be closely watched for immunological irregularities. (Consumer Summary produced by Reliance Medical Information, Inc.)
CAPTIONS: Serum protein electrophoresis for one case. (graph); Blot hybridization analysis of immunoglobulin genes. (diagnostic image); Background information on schizophrenic patients in study. (table); Laboratory data obtained on patients at entry into study. (table); Comparison of lymphocyte function between controls and patients. (table); Serial measurement of IgM and activated PTT in 6 patients. (chart)

SPECIAL FEATURES: illustration; graph; diagnostic image; table; chart
DESCRIPTORS: Immunoglobulin M--Measurement; Chlorpromazine--Adverse and side effects; Schizophrenia--Drug therapy; Antinuclear antibodies--Measurement; Immunopathology--Causes of
FILE SEGMENT: HI File 149

12/5/17 (Item 6 from file: 149)

01150393 SUPPLIER NUMBER: 06850566 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Biomaterials and biomedical devices.
Hanker, Jacob S.; Giammara, Beverly L.
Science, v242, n4880, p885(8)
Nov 11,
1988
PUBLICATION FORMAT: Magazine/Journal ISSN: 0036-8075 LANGUAGE: English
RECORD TYPE: Fulltext TARGET AUDIENCE: Academic
WORD COUNT: 6060 LINE COUNT: 00656

SPECIAL FEATURES: illustration; photograph
DESCRIPTORS: Biomedical engineering--Research; Biomedical materials--Research; Prosthesis--Research; Cardiovascular instruments, Implanted--Research; Polymers in medicine--Research; Artificial organs--Research; Dental materials--Research
FILE SEGMENT: MI File 47
?

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Set     Items   Description
S1        112   AU=(DESAI A? OR DESAI, A?)
S2         19   S1 AND (TREATMENT? OR THERAP? OR TISSUE?)
S3         19   IDPAT (sorted in duplicate/non-duplicate order)
S4          8   S1 AND (RADIOFREQUENC? OR RADIO()FREQUENC? OR RF)
File 347:JAPIO Nov 1976-2005/Feb(Updated 050606)
         (c) 2005 JPO & JAPIO
File 350:Derwent WPIX 1963-2005/UD,UM &UP=200538
         (c) 2005  Thomson Derwent
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4/5/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX

016187658 **Image available**
WPI Acc No: 2004-345544/200432
Related WPI Acc No: 1994-199421; 1995-114646; 1996-049368; 1996-116212; 1999-130316; 1999-619573; 2001-380347; 2003-173835; 2003-625525; 2003-678609; 2004-212697
XRPX Acc No: N04-276210

Radio frequency **electrode device for endoscopic surgical procedure, has electrode stem with conductor connecting tip of electrode tip module at distal end to connector at proximal end to connect to** radio frequency **energy source**

Patent Assignee: DESAI A H (DESA-I)
Inventor: **DESAI A H**
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 6730081	B1	20040504	US 91779108	A	19911018	200432	B
			US 9325003	A	19930302		
			US 94259712	A	19940614		
			US 96637327	A	19960422		
			US 97976981	A	19971124		

Priority Applications (No Type Date): US 97976981 A 19971124; US 91779108 A 19911018; US 9325003 A 19930302; US 94259712 A 19940614; US 96637327 A 19960422
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6730081	B1		42	A61F-005/00	CIP of application US 91779108
					CIP of application US 9325003
					CIP of application US 94259712
					CIP of application US 96637327
					CIP of patent US 5322503
					CIP of patent US 5562703
					CIP of patent US 5976129

Abstract (Basic): US 6730081 B1

NOVELTY - The device has an electrode stem with a conductor that connects the tip of an electrode tip module at a distal end to a connector at a proximal end for connection to a source of **RF** energy (285). An insulative unit insulates a portion of the conductor and a telescope guide unit constructed of electrically insulative material guides an endoscopic telescope.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(a) a method of operating an endoscopic surgical instrument for tissue treatment by application of **RF** energy

(b) an endoscopic surgical instrument.

USE - Used with an endoscope for vaporizing, coagulating and cutting of tissue during laparoscopic or endoscopic surgical procedure.

ADVANTAGE - The electrode device cuts, vaporizes and coagulates the tissue simultaneously, thereby easily removing the tissue and reduce bleeding.

DESCRIPTION OF DRAWING(S) - The drawing shows a perspective view of an endoscopic surgical instrument.

RF electrode assembly (202)
Housing (210)
Irrigation valve assembly (214)

Elongated portion (228)
RF energy source (285)
pp; 42 DwgNo 17/61
Title Terms: RADIO; FREQUENCY; ELECTRODE; DEVICE; ENDOSCOPE; SURGICAL; PROCEDURE; ELECTRODE; STEM; CONDUCTOR; CONNECT; TIP; ELECTRODE; TIP; MODULE; DISTAL; END; CONNECT; PROXIMITY; END; CONNECT; RADIO; FREQUENCY; ENERGY; SOURCE
Derwent Class: P32; S05
International Patent Class (Main): A61F-005/00
File Segment: EPI; EngPI

4/5/2 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX

014507624
WPI Acc No: 2002-328327/200236
Related WPI Acc No: 2004-080296
XRAM Acc No: C02-094805
XRPX Acc No: N02-257595
Apparatus useful for supporting/suspending a body organ comprises an elongated member for supporting body organ
Patent Assignee: DESAI A (DESA-I)
Inventor: **DESAI A**
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20020007222	A1	20020117	US 2000547708	A	20000411	200236 B
			US 2001910474	A	20010720	

Priority Applications (No Type Date): US 2001910474 A 20010720; US 2000547708 A 20000411
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20020007222	A1		22	A61F-002/04	CIP of application US 2000547708

Abstract (Basic): US 20020007222 A1
NOVELTY - An apparatus for supporting/suspending a body organ comprises an elongated member constructed of material (A) selected from a first group consisting of polymers and co-polymers. The member included a first length (a) having several protrusions and first end portion with a guide hole for attachment of a tool, and a second length (b) having first end attached to a second end of (a).
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:
(1) an apparatus for installing a structure for supporting the body organ containing an elongated, curved needle with a hooked tip at each of first and second ends of the needle, and a removable handle for attachment on a selected one of the first and second ends of the needle; and
(2) supporting the body organ involving either
(i) placing the elongated support apparatus in contact with an exterior of the organ or
(ii) injecting a substance between the organ and another body part.

USE - As a support for supporting or lifting a prolapsed body organ (e.g. urethra, colon, stomach, rectum and uterus) (all claimed). The apparatus is an internal stent apparatus.
ADVANTAGE - The improved stent can easily be removed, can resist migration after installation and has a coating for delivery of treatment substance. The bulged out central portion of the stent

provides enhanced lumen wall resistance to avoid migration. The locking feature of a ribbon structure prevents the stent from collapsing and thus maintains lumen opening.

pp; 22 DwgNo 0/30

Title Terms: APPARATUS; USEFUL; SUPPORT; SUSPENSION; BODY; ORGAN; COMPRISE; ELONGATE; MEMBER; SUPPORT; BODY; ORGAN

Derwent Class: B07; D22; P32

International Patent Class (Main): A61F-002/04

File Segment: CPI; EngPI

4/5/3 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

012813342 **Image available**

WPI Acc No: 1999-619573/199953

Related WPI Acc No: 1994-199421; 1995-114646; 1996-049368; 1996-116212; 1999-130316; 2001-380347; 2003-173835; 2003-625525; 2003-678609; 2004-212697; 2004-345544

XRPX Acc No: N99-456920

RF (radio frequency) **electrode for endoscopic surgical instrument**

Patent Assignee: DESAI A H (DESA-I)

Inventor: **DESAI A H**

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5976129	A	19991102	US 91779108	A	19911018	199953	B
			US 9325003	A	19930302		
			US 94259712	A	19940614		
			US 94331046	A	19941028		
			US 96637327	A	19960422		

Priority Applications (No Type Date): US 96637327 A 19960422; US 91779108 A 19911018; US 9325003 A 19930302; US 94259712 A 19940614; US 94331046 A 19941028

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5976129	A		32	A61B-017/36	CIP of application US 91779108
					CIP of application US 9325003
					CIP of application US 94259712
					CIP of application US 94331046
					CIP of patent US 5322503
					CIP of patent US 5662680

Abstract (Basic): US 5976129 A

NOVELTY - The electrode comprises a field enhancer in the form of a roller with a helix shaped protrusion (598) functioning as an **RF** energy director.

USE - For electrosurgical instruments, especially endoscopic electrosurgical instruments.

ADVANTAGE - Provides better control over the volume of tissue ablation.

DESCRIPTION OF DRAWING(S) - The drawing shows the electrode.

Helical protrusion (598)

pp; 32 DwgNo 45/61

Title Terms: **RF** ; RADIO; FREQUENCY; ELECTRODE; ENDOSCOPE; SURGICAL; INSTRUMENT

Derwent Class: P31; S05

International Patent Class (Main): A61B-017/36

File Segment: EPI; EngPI

4/5/4 (Item 4 from file: 350)
DIALOG(R)File 350:Derwent WPIX

012324210 **Image available**
WPI Acc No: 1999-130316/199911
Related WPI Acc No: 1994-199421; 1995-114646; 1996-049368; 1996-116212; 1999-619573; 2001-380347; 2003-173835; 2003-625525; 2003-678609; 2004-212697; 2004-345544
XRPX Acc No: N99-094807

Endoscopic surgical instrument assembly for continuous evacuation of fluid into and out from body cavity - has annular opening provided in central portion of control structure for passing endoscope probe that extends to annular opening of probe

Patent Assignee: DESAI A H (DESA-I)
Inventor: **DESAI A H**
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5861002	A	19990119	US 91779108	A	19911018	199911 B
			US 9325003	A	19930302	
			US 94259712	A	19940614	
			US 96639199	A	19960426	

Priority Applications (No Type Date): US 96639199 A 19960426; US 91779108 A 19911018; US 9325003 A 19930302; US 94259712 A 19940614
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5861002	A		21	A61B-017/50	CIP of application US 91779108
					CIP of application US 9325003
					CIP of application US 94259712
					CIP of patent US 5322503
					CIP of patent US 5562703

Abstract (Basic): US 5861002 A

NOVELTY - An annular opening is provided in the central portion (332) of the control structure for passing an endoscope probe (316) that extends to the annular opening (360) in a probe (309). DETAILED DESCRIPTION - An electrically conductive sleeve (344) is provided for guiding a nickel-titanium electrode (306). A control structure is provided for extending and retracting the electrode, which consists of a central portion (332) having guide bars (334) extending to an end block (336). A supply connector (342) is coupled to the hollow core of the electrode for injecting liquid. A receptacle block (314) consisting of a lock ring (326) and a handle (328) interlocks a treatment unit assembly to a housing (308) of an endoscopic surgical instrument, so that the electrode and the sleeve extends through a single access conduit of the endoscopic surgical instrument.

USE - For continuous evacuation of fluid into and out from body cavity.

ADVANTAGE - Enables to measure tissue impedance precisely and to perform controlled ablation of tissue by utilising **RF** electrodes. Simplifies cleaning process, access ports and valves. Performs irrigation and evacuation along single line into patient by using controller. DESCRIPTION OF DRAWING(S) - The figure shows an endoscopic surgical instrument assembly with hollow electrode. (306) Hollow core electrode; (309) Probe; (316) Endoscope probe; (332) Central portion of control structure; (360) Annular opening.

Dwg.25/27
Title Terms: ENDOSCOPE; SURGICAL; INSTRUMENT; ASSEMBLE; CONTINUOUS; EVACUATE; FLUID; BODY; CAVITY; ANNULAR; OPEN; CENTRAL; PORTION; CONTROL; STRUCTURE; PASS; ENDOSCOPE; PROBE; EXTEND; ANNULAR; OPEN; PROBE
Derwent Class: P31; S05
International Patent Class (Main): A61B-017/50
File Segment: EPI; EngPI

4/5/5 (Item 5 from file: 350)
DIALOG(R)File 350:Derwent WPIX

010742271 **Image available**
WPI Acc No: 1996-239226/199624
Related WPI Acc No: 1994-199421; 1995-114646; 1996-049368; 1996-116212
XRPX Acc No: N96-200270

Endoscopic surgical instrument with fluid irrigation-evacuation function - uses access conduit to connect probe connector to valved irrigation and evacuation ports, to provide connection for RF energy and access for surgical instruments

Patent Assignee: DESAI A H (DESA-I)
Inventor: **DESAI A H**
Number of Countries: 062 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9613218	A1	19960509	WO 95US13892	A	19951027	199624	B
AU 9644052	A	19960523	AU 9644052	A	19951027	199635	
US 5662680	A	19970902	US 91779108	A	19911018	199741	
			US 9325003	A	19930302		
			US 94259712	A	19940614		
			US 94331046	A	19941028		

Priority Applications (No Type Date): US 94331046 A 19941028; US 91779108 A 19911018; US 9325003 A 19930302; US 94259712 A 19940614
Cited Patents: US 3994287; US 4402310; US 4573448; US 4815467; US 5186714
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9613218	A1	E	51	A61B-017/50	
Designated States (National): AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW MX NO NZ PL PT RO RU SD SE SI SK TJ TT UA UZ VN					
Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG					
AU 9644052	A			A61B-017/50	Based on patent WO 9613218
US 5662680	A		22	A61B-017/50	CIP of application US 91779108
					CIP of application US 9325003
					CIP of application US 94259712
					CIP of patent US 5322503
					CIP of patent US 5562703

Abstract (Basic): WO 9613218 A

The instrument (20) has irrigation (21) and evacuation (22) ports connected through independent valves (23, 24) to a single access conduit (25). The conduit leads from the valves and their respective conduits (23a, 24a) to a probe connector (26), which receives the locating end (27) of a surgical probe (28). A monopolar/bipolar **RF** connector (29) is provided near the probe connector to connect the instrument to a standard **RF** source.

The **RF** connector exits into the access conduit where it connects

with a point (30) on the locating end of the probe. The instrument also has a port (31) through which the surgeon can insert microsurgical instrumentation and viewing devices into the access conduit.

ADVANTAGE - Allows continuous irrigation and evacuation during microsurgical procedures. Provides measurement of tissue impedance and ablation of tissue using fixed or retractable electrodes.

Dwg.2/28

Title Terms: ENDOSCOPE; SURGICAL; INSTRUMENT; FLUID; IRRIGATE; EVACUATE; FUNCTION; ACCESS; CONDUIT; CONNECT; PROBE; CONNECT; VALVE; IRRIGATE; EVACUATE; PORT; CONNECT; **RF** ; ENERGY; ACCESS; SURGICAL; INSTRUMENT
Derwent Class: P31; S05
International Patent Class (Main): A61B-017/50
File Segment: EPI; EngPI

4/5/6 (Item 6 from file: 350)
DIALOG(R)File 350:Derwent WPIX

010619259 **Image available**
WPI Acc No: 1996-116212/199612
Related WPI Acc No: 1994-199421; 1995-114646; 1996-049368; 1996-239226; 1999-130316; 1999-619573; 2001-380347; 2003-173835; 2003-625525; 2003-678609; 2004-212697; 2004-345544
XRPX Acc No: N96-097271

Endoscopic surgical instrument - has probe connector for receiving and retaining hollow surgical probe and radio frequency **connector which exit into access conduit to make** RF **connection with probe**

Patent Assignee: DESAI A H (DESA-I)
Inventor: **DESAI A H**
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5490836	A	19960213	US 91779108	A	19911018	199612	B
			US 9325003	A	19930302		
			US 94329676	A	19941026		

Priority Applications (No Type Date): US 9325003 A 19930302; US 91779108 A 19911018; US 94329676 A 19941026
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5490836	A		12	A61N-001/30	CIP of application US 91779108 Cont of application US 9325003 CIP of patent US 5322503

Abstract (Basic): US 5490836 A

The instrument includes a single access conduit including

i) a first end having a probe connector for attaching a surgical probe to it. An opposite end has a port for insertion of surgical instrumentation. A valve cartridge includes a body portion, an irrigation input connector for receiving fluid into the body portion. An evacuation output connector is used for expelling fluid and body tissue from the body portion.

A male connector is used for transmission of fluid from the body portion, and for receiving fluid and body tissue into the body portion. A first valve provides a fluid direction within the body portion for interconnecting the male connector fitting to the irrigation input connector. The first valve has a manually operable push button activation device.

USE/ADVANTAGE - For automatic irrigation and evacuation of patient during laparoscopic or endoscopic surgical procedures. Allows

cooperation with disposable or non-disposable valving system, while facilitating their easy cleaning using common flush techniques. allows to be controlled by one hand of user

Dwg.13/14

Title Terms: ENDOSCOPE; SURGICAL; INSTRUMENT; PROBE; CONNECT; RECEIVE; RETAIN; HOLLOW; SURGICAL; PROBE; RADIO; FREQUENCY; CONNECT; EXIT; ACCESS; CONDUIT; **RF** ; CONNECT; PROBE
Derwent Class: P34; S05
International Patent Class (Main): A61N-001/30
International Patent Class (Additional): A61M-001/00
File Segment: EPI; EngPI

4/5/7 (Item 7 from file: 350)

DIALOG(R)File 350:Derwent WPIX

010552415 **Image available**
WPI Acc No: 1996-049368/199605
Related WPI Acc No: 1994-199421; 1995-114646; 1996-116212; 1996-239226; 1999-130316; 1999-619573; 2001-380347; 2003-173835; 2003-625525; 2003-678609; 2004-212697; 2004-345544
XRPX Acc No: N96-041419

Endoscopic surgical instrument for continuous irrigation and evacuation of fluid into body cavity - uses single access conduit with irrigation and evacuation ports which receives endoscope and electrode assembly

Patent Assignee: DESAI A H (DESA-I)
Inventor: **DESAI A H**
Number of Countries: 061 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9534259	A1	19951221	WO 95US9152	A	19950612	199605	B
AU 9531374	A	19960105	AU 9531374	A	19950612	199614	
US 5562703	A	19961008	US 94259712	A	19940614	199646	

Priority Applications (No Type Date): US 94259712 A 19940614
Cited Patents: US 4402310; US 4565200; US 5186714; US 5195958
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9534259	A1	E	45	A61F-005/48	

Designated States (National): AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW MX NO NZ PL PT RO RU SD SE SI SK TJ TT UA UZ VN
Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT KE LU MC MW NL OA PT SD SE SZ UG

AU 9531374	A			Based on patent WO 9534259
US 5562703	A		18 A61B-017/50	

Abstract (Basic): WO 9534259 A

The instrument (201) has a housing (210) which includes a single access conduit and has irrigation and evacuation ports, each port connected to the conduit through an independent valve. The conduit terminates in an opening in the housing with a closure. A viewing endoscope is insertable into the conduit and is extendable beyond its external end.

An electrode assembly (202), with two or more retractable **RF** electrodes spaced at predetermined distances and angles, is insertable through the aperture and the single access conduit to extend beyond the conduit. Each electrode is connected to means for supplying **RF** energy and for continuous measurement of the impedance across the electrodes.

USE/ADVANTAGE - Continuous evacuation and irrigation of fluid into

body cavity during e.g Laparoscopic or Endoscopic surgical procedures. Allows continuous irrigation and evacuation along a single line inserted into patient.

Dwg.17/24

Title Terms: ENDOSCOPE; SURGICAL; INSTRUMENT; CONTINUOUS; IRRIGATE; EVACUATE; FLUID; BODY; CAVITY; SINGLE; ACCESS; CONDUIT; IRRIGATE; EVACUATE; PORT; RECEIVE; ENDOSCOPE; ELECTRODE; ASSEMBLE
Derwent Class: P31; P32; S05
International Patent Class (Main): A61B-017/50; A61F-005/48
File Segment: EPI; EngPI

4/5/8 (Item 8 from file: 350)

DIALOG(R)File 350:Derwent WPIX

009931710 **Image available**
WPI Acc No: 1994-199421/199424
Related WPI Acc No: 1995-114646; 1996-049368; 1996-116212; 1996-239226; 1999-130316; 1999-619573; 2001-380347; 2003-173835; 2003-625525; 2003-678609; 2004-212697; 2004-345544
XRPX Acc No: N94-156983

Endoscopic surgical instrument - has radio frequency **connector located on housing of instrument and passing into access conduit**

Patent Assignee: DESAI A H (DESA-I)
Inventor: **DESAI A H**
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5322503	A	19940621	US 91779108	A	19911018	199424	B

Priority Applications (No Type Date): US 91779108 A 19911018
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5322503	A		10	A61M-001/00	

Abstract (Basic): US 5322503 A

The endoscopic surgical instrument (20) includes an irrigation port (21) and an evacuation port (22). Each port (21) and (22), is connected through independent valves (23) and (24), respectively to a single access conduit (25). The connection between the valves (23,24) and conduit (25) is along connector tubes (23a, 24a). The access conduit (25) leads from the valves and their respective valve conduits to a probe connector (26). This probe connector (26) is designed to receive one end, the locating end (27) of a surgical probe (28) which would be used during microsurgical procedures.

The surgical instrument (20) also includes a port (31) which allows the surgeon to insert microsurgical instrumentation (not shown) along the access conduit (25) and the bore of the hollow probe (28) to exit form the end (32) of it. The port (31) should provide a fluid-tight seal when no microsurgical instrumentation is being used with the surgical instrument (20). This will prevent fluid which may be moving along the access conduit (25) to or form the patient, from leaking.

USE - Esp. during laparoscopic surgery.

Dwg.2/11

Title Terms: ENDOSCOPE; SURGICAL; INSTRUMENT; RADIO; FREQUENCY; CONNECT; LOCATE; HOUSING; INSTRUMENT; PASS; ACCESS; CONDUIT
Derwent Class: P34
International Patent Class (Main): A61M-001/00
File Segment: EngPI